

Precision

NOV. 1971

Vol. 16 No. 7

Fifty Cents

SHOOTING

ALLAN KNOWLES (right) who equaled the National Open Record of 1600-142X for the Metallic Sight Aggregate, held by Major Pres Kendall, establishing a new National Civilian Record for that course of fire. He was Grand Aggregate winner at the Prescott, Ariz., Fall 3200. George Stidworthy (left) was runner-up and winner of the Any Sight Aggregate. Bob Boydston fired the only other 1600 with scope, while Debbie Hicks, 17, was High Lady and 3rd in the Grand Aggregate. (See pages 20 23.)

—Photo by Bob Evenden

*a magazine
for shooters
by shooters*



PRECISION SHOOTING

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PRECISION SHOOTING is printed by letterpress. Display cuts are to be furnished by the advertiser. Advertising engravings will be made at standard rates if good black and white glossy prints are provided. Displays will be made to Advertiser's specifications. All normal composition will be set according to our own standards. Rate cards will be mailed to Advertisers on request.

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IBS MEMBERSHIP DRIVE

TOP 5 IN CONTEST

Paul Menjik
Lloyd Allison
R. Moorhead
C. D. McElwee
Ed Ferguson

All other 25 contestants should get busy. **Tempus Figit.**

The first prize Rem. 40XBR 6/47 rifle has been augmented by 500 Clarence Detsch 70 grain BT bullets!

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Reservations for IBS Winter Meeting

HOLIDAY EAST AT BINGHAMTON, N. Y.

Those traveling Interstate 81 — Exit 2W. For those who travel Route 17, use the Court Street Exit #75.

Call Holiday Inn nearest you and reservations will be completed. Be sure to mention **IBS Meeting, Holiday East, Binghamton, N. Y.**

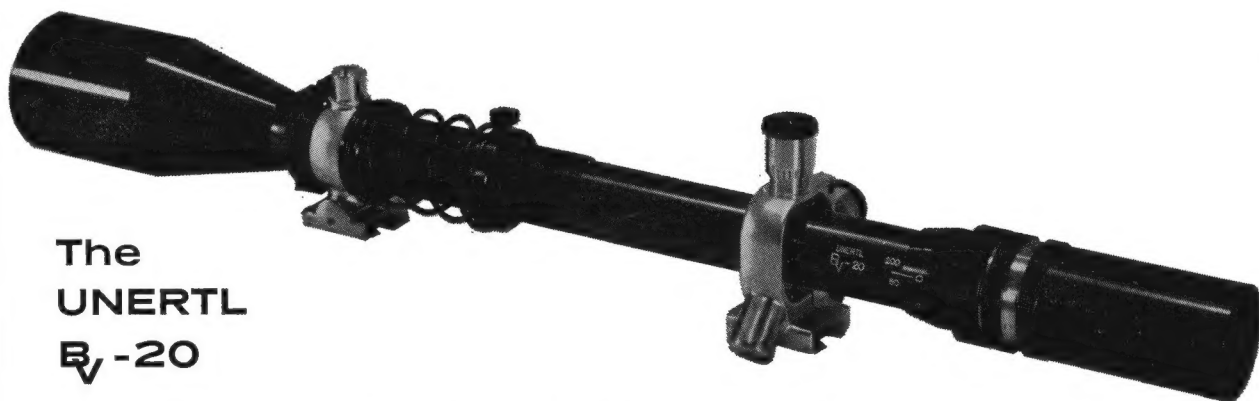
Saturday, Jan. 8, 1972 — Meeting time 9:30 A.M.

Sunday, Jan. 9, 1972 — Meeting time 9:00 A.M.

Bull Sessions — Friday and Saturday evenings

Ladies Program with Prizes

For direct reservations call: **Beverly Hoyle**, Holiday East, Binghamton.



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President's Message

Annual Meeting

OFFICIAL NOTICE

Nominating Committee Report

Nominating Committee: Myles Holister, Robert Pease and Williams Tardy.

For President the Committee has presented the names of two men. They are as follows: Jack Deming, Lawrenceville, Pa., and Carl Lynn, Williamsport, Pa.

For Treasurer, Malcolm E. Barron, Beverly, Mass. and George J. Stannard, Fairhaven, Vermont have been presented.

A ballot has been provided in the October issue of Precision Shooting, 1971. The ballot will be placed in all current IBS members' magazines. These ballots should be properly marked and returned to the IBS office postmarked not later than Jan. 1, 1972.

* * *

The consensus of the Executive Committee is that the office of Recording Secretary be appointive, with salary, rather than elective.

So, no nominees for this office are being submitted, pending action by the Board of Directors at the Annual Meeting.

A. H. Garcelon, Pres.



To the Membership of International Benchrest Shooters:

The bylaws of I.B.S. require the publishing of the agenda of the Annual Meeting for three successive issues (i.e. 3 months) in the official journal "Precision Shooting" prior to the meeting.

The members of the Executive Committee have been requesting the members to submit items for discussion and necessary action since the last annual meeting. The following list of proposals are those that have been suggested and will be included in the agenda of the Annual Meeting.

1. Committee Reports including delayed and/or tabled Committee Reports.

2. Report of the Referee School and recommendations for improving, clarification and/or firming of rules.

3. Consideration of establishing a "Powder-puff" or "Annie Oakley" match at certain tournaments; N.B. a match or matches with proper

awards for the ladies who have never shot in competition.

4. Activation of NBRSA Liaison Committee.

5. Consideration of restriction of competitors in tournaments to I.B.S. members.

6. Establishment of method of compensating I.B.S. Recording Secretary.

7. (a) Establishing an International Membership. Australians and Canadians both wish to be part of I.B.S. This necessitates a change in bylaws.

(b) Consideration of rule changes from Australia.

8. Changes in benchrest (heavy) rifle course-of-fire and rules.

9. Consideration of need to add to Varmint and Sporter rifle rules a specification which strictly eliminates the possibility of barrel bedding blocks.

10. Consideration of the use by one method or another of .22 calibers and/or the unmodified factory rifles in Hunter rifle class competition.

11. Classification of Hunter Rifle competitors according to equipment rather than by score.

12. The possible establishment of Advisory Board or Council (with voice but without vote) made up of Ex-Presidents and Vice Presidents.

13. The consideration of establishing an office of Second Vice President. This officer to be by appointment for year 1972, and duly elected each following year thereafter.

14. Serious consideration for change in officer setup to assure continuity in this activity and a logical, orderly progression in the organization.

15. Match fees.

16. Require alternating benches in all registered matches. Note this would probably require increase in match fees.

17. Specific duty assignment to various offices in I.B.S.

18. Shooting in World Championship Sporter and Light Varmint classes at 100 yards on one day, 200-yard events on other day.

19. Consideration of sticker for gun once weighed for tournament.

20. Possibility of using squad ticket with specific shooting times assigned.

21. Discussion and action on reports of:

(a) Benchrest Rifle (heavy gun) Committee

(b) Heavy Varmint Committee

(c) Light Varmint Committee

(d) Sporter Rifle Committee

(e) Hunter Rifle Committee

22. Establishing of a firm interpretation of the rifle weight rule in classes where specific weight is a rule. This is aimed at the extra ounce allowed for scale discrepancy.

23. (On agenda) A competitor can receive only one tie per match or aggregate per range per class. For instance, if he wins more than one match at 100 yards in the Light Varmint Class, he can receive only one tie but is eligible for a second tie at 200 yards in the Light Varmint class. If a competitor should be eligible for a second tie in the same event, it should follow that it cannot be awarded to another as second place winner.

This will eliminate any one competitor from the possibility of winning six ties in one event. Since one person can only wear one tie, this should prevent a surplus of ties within the organization and thereby enhance their value. If ties are deemed by members to have no value or honor, their use and expense should be discontinued.

24. Breaking of ties, particularly, in Hunter class.

For the information of the members:

The Benchrest Rifle Committee elected at the I.B.S. benchrest rifle tournament at Johnstown, New York, June 1971 consists of:

Robert White, Chairman

Richard DeNeve

George Etter

Heavy Varmint, Light Varmint, and Sporter Committees were elected at the I.B.S. Championships at Council Cup, Pennsylvania, August 11, 1971, and are as follows:

Light Varmint Committee

Jeanne Lynn, Chairman

Jack Deming

Carl Lynn

Heavy Varmint Committee

Robert White, Chairman

William Dunn

Malcolm Baron

Robert Pease

Sporter Rifle Committee

James Stekl, Chairman

Terry Detsch

Wally Hart

Donna Lee Stekl

Hunter Rifle Committee

Robert Hummel, Chairman

Emmett Francis

James Loucks

— SPECIAL NOTE —

The October ballot should not have included the name of Albert Creighton for IBS President. New ballots will be mailed to those who checked his name.



INTERNATIONAL
BENCHREST SHOOTERS

IBS Officers

PRESIDENT

Dr. A. H. Garcelon
133 State Street
Augusta, Maine 04330
Phone 207 622-1711

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IBS

SHOOT REPORTS

RIDGE SPORTSMEN'S CLUB, INC.

August 22, 1971

The Ridge Sportsmen's Club, Inc. held their third and final Heavy Varmint match of the season on August 22 with 19 shooters registered. As usual, the weather was perfect except for a thunderstorm which at least had the common courtesy to wait until the final relay was fired and the targets were gathered. The final targets were scored and the aggregates tabulated in near darkness. Our thanks to the shooters who had the patience to wait through this storm for the match results.

The final tabulations showed our friend from Syracuse, Frank James, the grand aggregate winner with an aggregate of .4312. Second and third places went to Leon Weld with .4588 and Ken Manktelow with .4611.

Prizes were also awarded for the best 3 match grand aggregates, 200 yard aggregates, and 100 yard aggregates. The prizes were donated by the club and several friends of the shooting fraternity. Our thanks go to these people. The club has a policy of awarding only one prize per competitor so 9 persons who attended all 3 matches left with a prize. The prize for the best 3 match grand agg. went to Art Blensinger with an agg. of .4650, second place to Frank James .4821, and third place to Leon Weld .4959. Prizes for the first thru third 200 yard aggregates went to L. Wellbrock, F. Bonter, and J. Collins. At 100 yards it was K. Manktelow, R. Otis, and H. Austin.

Our thanks go to all of the people who have made these matches possible, Ted Boughton for his help and guidance, Arlene Boughton for the delicious food served at the matches, the club members and others who have helped with the many duties of running a match, and last but not least, the many shooters who attended our matches. We are looking forward to seeing each and every one of you again next year.

Rodged Burkhart
Reporter

MILLERTON GUN CLUB

Millerton, N. Y.

SCHEDULE FOR

1972 SNO BALL MATCHES

The 9th consecutive annual SNO BALL MATCHES will be held again this year at the Millerton Gun Club, Millerton, N. Y. We are enlarging the facilities for shooters with additional benches and target frames

this year in order to accommodate additional shooters with fewer relays. Our aim is still to allow the maximum amount of shooting in the least possible time so the contestants can return home at an early hour. Naturally, another factor of course is the plain dark fact of early darkness.

The course of fire for Heavy Varmint class is one warm up target and eight record targets for each match. The Hunter class of fire will be the one warm up match and five record targets. Trophies will be awarded for first place for both group and score in the Heavy Varmint class as well as a certificate for small group of the day; a trophy for first place in each classification of the Hunter matches plus a certificate for any Hunter making a perfect score of 250. Grand aggregate awards will once more be made at the end of the season at our annual banquet. Grand aggregate scores will be based on the best 5 days of the eight total shoots. In other words, if you miss a match or shoot poorly one day, it may not hurt you in computing the final average.

To date there is no chance of firing a 200 yd. course of fire at the Millerton Gun Club. The negotiations for the additional property are still in limbo.

For additional information on these winter shoots, write to: John Dewey, Clinton Corners, N. Y. for a copy of the complete match program. The shooters who are on our present list will receive an extra copy of the program to pass on to a prospective Bench Rest shooter.

Match dates as follows: January 16, January 30, February 13, February 27, March 12, April 9, April 23, May 7.

John Dewey
Clinton Corners, N. Y. 12514
(914) 266-3421

SEASON RESULTS Rockville, Connecticut June 13, 1971

Heavy Varmint (Agg.)	
Bill Ferguson	.347
Mary Lou Santarpia	.367
Bob Wade	.376
Light Varmint (Agg.)	
Richard Czarkowski	.432
Bob Burns	.486
Ken Viara	.487
Hunter	
Lyle Preston	96*
Bob King	95
Charlie Santarpia	93

* Possible 100

July 11, 1971

Heavy Varmint	
Bob Wade	.258
Fran Vahle	.301
Charlie Santarpia	.335
Light Varmint	
Fran Vahle	.346
Ken Viara	.381
Dave Brennan	.470
Hunter	
Mal Barron	.96
Lyle Preston	.96
Bob King	.94

August 29, 1971

Heavy Varmint	
Bob Wade	.333
Mary Lou Santarpia	.348
Charlie Santarpia	.418
Light Varmint	
Bob Wade	.482
Dave Brennan	.483
Fran Vahle	.497
Hunter	
Lyle Preston	.96
Fran Vahle	.95
Charlie Santarpia	.94

September 19, 1971

Heavy Varmint	
Mary Lou Santarpia	.347
Bob Wade	.397
Dave Brennan	.398
Light Varmint	
Dave Brennan	.491
Joe Vinci	.544
Richard Czarkowski	.575
Hunter	
Charlie Santarpia	.93
Richard Czarkowski	.93
Lyle Preston	.89

October 3, 1971

Heavy Varmint	
Bob Wade	.434
Royce Kilbourne	.480
Bob King	.523
Light Varmint	
Dave Brennan	.357
Bob Wade	.590
Ken Viara	.642
Hunter	
Bob King	.96
James Dostou	.91
Lyle Preston	.88

Season Trophy Winners (Best 4 of 5 aggregates)

Heavy Varmint	
Bob Wade	.341 agg.
Light Varmint	
Dave Brennan	.450 agg.
Hunter	
Bob King	.94.5 average

For those people who worry over such matters, equipment of the two varmint class winners as follows:

Bob Wade, heavy varmint winner—an original Shilen action, SS&D barrel in standard .222 caliber, with approximately 3,800 rounds fired in

anger to date. Stock is a Steinhour blank, in SS&D Varmint pattern, and trigger is a Canjar single stage. Magnification of the target, courtesy of Lyman, was twenty times actuality, with a one-eighth dot in the middle of all this optical wizardry. Bullets were created by Mr. Wade in B&A dies, and were found to weigh 52 grains. Bob used Remington cases, taper reamed inside neck, ignited by 7½ primers, and then proceeded to stuff these hulls with exactly 21.5 grains of 4198 powder. Sizing done with a lapped-out RCBS neck sizing

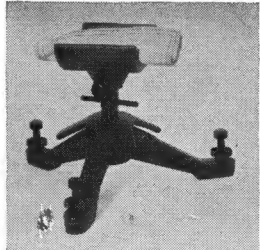
die, and seating with a Wilson straight line seater.

Dave Brennan—light varmint winner. A sleeved 660 Remington action, Hart sporter weight barrel in 14" twist in standard 6 x 47 caliber. Trigger is a Hart 2 ounce, and stock is a Hart 3 piece laminated. Metal work by Clyde and Jerry Hart, and stock-work by Cam Irwin of the Outdoorsman Gun Shop of Windsor Locks, Conn., who is rapidly gaining a reputation as a gunsmith specializing in accuracy work locally. Load used

(Next page please)

SUPBR "Superior" Benchrest Stand 33.00

SBR-1 Standard Benchrest Stand W/3 sandbags 23.50



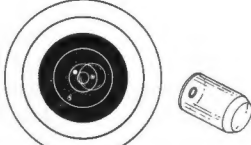
FSA Jumbo Type Fore End Stop, mention rifle, from 5.75



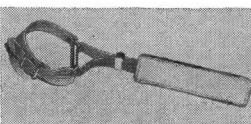
AAT All Angle Tripod, mention scope, gray or green 22.75



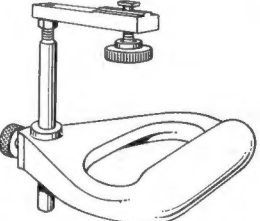
C-H X100 MAGNIFYING .22 Cal. scoring gauge; will not damage the shot hole 4.00



186 Midcentury Cuff Combination 11.00



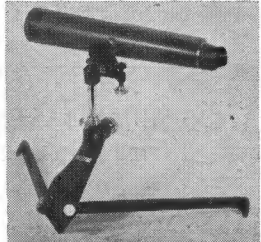
#1 Standard MR Cairo Palm Rest, aluminum 21.50



Freeland Sling Keeper, a fine necessity 1.50



OB BIPOD, Gray or Green. With Saddle or Lug Scope Holder 24.75



S&L SAGE color 26.75

FSB JUMBO fore-end stop Q/WD swivel & stud, mention gun	9.50	Lyman SUPERTARGETSPOT SCOPE 15-20 or 25X	137.50
184 DELUXE CUFF & QD Hook, give arm circumference	6.75	#10-AS EAR PROTECTORS	12.00
FREELAND TUBE REAR SIGHT, mention rifle and front sight (Adapter base for Freeland Tube sight if needed \$4.50)	50.00	LEE LOADER, Mention Caliber and Ga. (NOT 10 ga.)	9.95
Freeland Kneeling Roll 9" long	6.50	LYMAN 310 Tool, for 1 caliber	18.50
Freeland cleaning guide for Anschütz, Win. & 40X	6.50	REDDING "MASTER" Powder and Bullet scale	18.50
Freeland "AR" shooting mat, 70"	31.00	Redfield Olympic rear sight, less base	26.95
MARK TIME PISTOL TIMER	8.95	Redfield Olympic front sight, less base	12.95
Justrite CARBIDE LAMP 2½"	6.50	#202 Tan or #209 Green 10X Rifle Shooting Coat	26.00
Micro rear & blade front pistol sight	15.50	PM5BDL PACHMAYR 5-GUN PISTOL KIT WITH DOOR	51.50
Hunter #1100 Russet holster, state model	5.25	WEAVER K 2.5 Scope	39.95
Standard loading dies, set	13.50 or 15.00	LEUPOLD COMPASS	13.95
		UNERTL BV/20 STD. SCOPE	148.00
		Ace trigger shoe, mention gun	2.50
		19" Olive or Green kit stool	12.00

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ROCK ISLAND, ILL. 61201

was 23.8 grains of 4198, 7½ Remington primers, and 70 grain Detsch bullets. Scope was Lyman 25x, with .0005 crosshairs. Rounds fired thru the barrel total 800; it is worthy of note that for the first 500 rounds of its existence, this gun refused to shoot, for love or money. One day in August (after the Nationals, naturally) it suddenly started shooting, for no apparent reason. Of such things are alcoholics made.

Dave Brennan
Reporter

**INTERNATIONAL HUNTER RIFLE
WORLD CHAMPIONSHIP
TOURNAMENT
CENTRAL PENNSYLVANIA
RIFLE CLUB, INC.
Dauphin, Pa.
September 18-19, 1971
36 Competitors**

Master Class: Ella P. McElwee won the Masters trophy with a 496-25X. Her equipment: Rem. 308, Hart barrel, 168 grain Sierra bullets backed by 43 grains of H380, Federal primers and a Weaver V9 scope. K. R. Bailey was second in the Master class with a 492-22X. Bailey chose 43.5 grains of 4895 pushing 168 grain Sierra bul-

lets in a Rem. .308. His scope was a 6X Bushnell.

Sixteen of the top 20 fired the 308 cal. Five of these were equipped with Douglas barrels, one Remington and the balance Hart. Three chose the 7x47 new wildcat and all used Hercules Reloader Eleven varying from 36 to 37 grains behind Speer 115 grain bullets. One of the top 20, Bob Reinoehl last year's champion, went the distance with a 6.5/250. Bob propelled 85 grain Sierra bullets with 32.5 grains of 3031. His action was Remington and barreled by a Hart stainless.

**MASTER CLASS
(Top 20)**

1. E. P. McElwee	496-25
Dauphin, Pa.	
2. K. R. Bailey	492-22
Jacobus, Pa.	
3. W. S. Huntington	491-15
Stewartsville, N. J.	
4. J. A. Miller	491-14
Duncannon, Pa.	
5. D. Flaharty	489-20
Red Lion, Pa.	
6. Joe Yagloski	488-21
Wyoming, Pa.	
7. R. Hummel	488-11
Reinholds, Pa.	
8. Jay Kohl	487-15
Birdsboro, Pa.	

9. L. Ressler	486-9
York, Pa.	
10. A. Albert	485-18
Wyomissing, Pa.	
11. C. A. Miller	485-15
Hamburg, Pa.	
12. O. Kohl	485-11
Birdsboro, Pa.	
13. W. Hart	482-7
Nescopeck, Pa.	
14. C. S. Driscoll	481-13
Forksville, Pa.	
15. L. L. Bupp	480-10
York, Pa.	
16. W. R. Fink, Jr.	478-9
Hamburg, Pa.	
17. G. W. Baker	476-8
Newport, Pa.	
18. R. Reinoehl	475-9
Shoemakersville, Pa.	
19. S. J. Lesley	472-9
Smyrna, Del.	
20. H. E. Kauffman	468-6
Duncannon, Pa.	

HUNTER CLASS

1. C. D. McElwee, Sr.	490-18
Dauphin, Pa.	
2. R. G. Smeltzer	486-14
Windsor, Pa.	
3. J. L. Loucks	480-12
York, Pa.	
4. G. E. Frye	479-10
Dauphin, Pa.	
5. R. T. Woollens	476-11
Dover, Del.	
6. W. Prokopchak	474-14
Dallas, Pa.	
7. B. L. Wolfe	472-6
Zion Grove, Pa.	
8. C. C. Eckrote	469-10
Drums, Pa.	
9. S. Starzinski	467-7
Kingston, Pa.	
10. E. A. Francis	465-9
Hamburg, Pa.	
11. R. J. Drexler	463-7
York, Pa.	
12. G. A. Woof	454-5
Dover, Del.	
13. N. L. McCann	452-4
Glen Rock, Pa.	

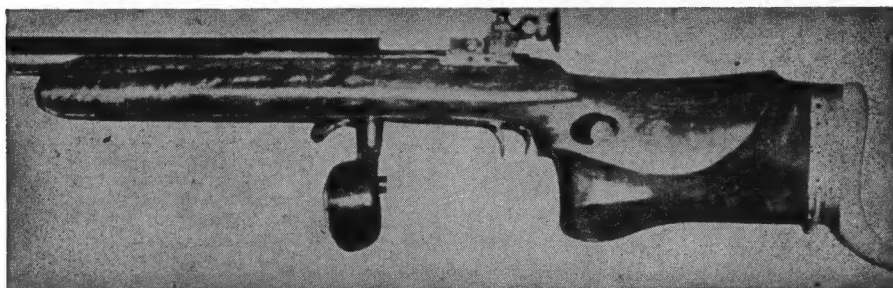
NOVICE CLASS

1. L. R. Loucks	477-10
York, Pa.	
2. G. Glodfelter	465-8
Bloomsburg, Pa.	
3. C. D. McElwee, Jr.	423-4
Dauphin, Pa.	

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THE CRANE CREEK GUN STOCK COMPANY, INC.
P.O. Box 268, Waseca, Minn.

**IBS OFFICIAL
WORLD RECORD**

**Shot at South Creek Rod & Gun Club
July 24, 1970**

Sporter Grand Aggregate — 3740

Jack Deming of Lawrenceville, Pa. is the holder of this record aggregate. Jack has the honor of holding the first IBS World Record Certificate.

TROPHIES AWARDED

Master

1. John A. Miller 248-7
2. Jay Kohl 245-10

Hunter

1. Dale Flaharty 249-14
2. S. Joseph Lesley 243-6

Novice

1. Robert G. Smeltzer ---- 232-6
2. Chas D. McElwee, Jr. -- 198-1

Hi Jr.

- Tom Cochran 225-2

The Warm-up match was won by Robert Reinoehl; score 49-3.

REGISTERED I.B.S. MATCH CANTON MCKINLEY CLUB

October 2-3, 1971

HEAVY VARMINT

23 Competitors

100 Yards (Top 5)

1. Alberts 2498
2. M. Walker 3304
3. B. Pease 3462
4. E. Tooley 3550
5. J. Jago 3570

200 Yards (Top 5)

1. Alberts 4695
2. Jim Young 4742
3. C. Lynn 4810
4. Mike Walker 4976
5. Bob Pease 5039

100 & 200 Yard Grand Aggregate
(Top 5)

1. Alberts 3596
2. M. Walker 4140
3. Bob Pease 4250
4. C. Lynn 4303
5. E. Tooley 4326

In the Heavy Varmint class, E. Tooley shot the smallest group at 100 yards—.100; at 200 yards, Ronald Fanta—.403.

LIGHT VARMINT

9 Competitors

100 Yards only (Top 5)

1. Jeanne Lynn 3548
2. E. Tooley 3894
3. Olive Walker 3914
4. R. Papp 4912
5. Mike Walker 5478

Light Varmint rifles were fired at 100 yds. only. Smallest group by LaFayette—.194. Of the nine competitors in the Light Varmint class only two fired the 222. The other seven all were using the 6-47. Olive Walker and O. Spencer were the two firing the 222.

— NOTICE —

The 1000 yard IBS match scheduled to be fired Nov. 21, 1971 at Williamsport, Pa. has been cancelled. Contact Richie Moorhead, R.D. 2, Athens, Pa. 18810 for further information.

A special "Hats Off" to H. Marshler and son who came down from Ontario, Canada for the match. Hope they can make it again sometime.

R. H. Johnson
3118 11th St. S.W.
Canton, O. 44710

IZAAK WALTON LEAGUE

York, Pa.

IBS REGISTERED HUNTER RIFLE MATCH

August 15, 1971

MASTER CLASS

(Top 5)

1. R. Hummel 246-8
Reinholds, Pa.
2. O. Kohl (Creedmoor) ---- 245-9
Birdsboro, Pa.
3. W. Fink, Jr. 245-9
Hamburg, Pa.
4. K. Bailey 245-8
Jacobus, Pa.
5. H. Kauffman 244-6
Duncannon, Pa.

HUNTER CLASS

(Top 5)

1. E. Francis 239-3
Hamburg, Pa.
2. G. Frye 238-6
Dauphin, Pa.
3. C. McElwee, Sr. 233-5
Dauphin, Pa.
4. R. Smeltzer 227-6
Windsor, Pa.
5. J. Loucks 227-4
York, Pa.

NOVICE CLASS

1. E. Gates 235-1
Harrisburg, Pa.
2. N. McCann 229-0
Glen Rock, Pa.
3. C. McElwee, Jr. 181-1
Dauphin, Pa.

Robert Hummel, top gun, shot a Rem.-Douglas barrel 7x47, Redfield 6X scope, 115 grain Speer bullets, 36 grains of Reloader 11.

CENTRAL PENNSYLVANIA RIFLE CLUB, INC.

Dauphin, Pa.

IBS REGISTERED HUNTER RIFLE MATCH

October 3, 1971

18 Shooters

The "Precision Shooting" Warm-up match went to Wm. Huntington (50-2X), Jay Kohl 2nd (247-4X).

J. A. Miller was top Master (248-14X).

C. D. McElwee was top Hunter (239-7X). Lou Ressler placed 2nd (238-4X).

PINE TREE RIFLE CLUB

Johnstown, N. Y.

August 21, 1971

HEAVY VARMINT

31 Competitors

*John Hollister Wins

Robert Raide won the 100 yard aggregate with a .2458. Bob shot with a Remington action, Hart barrel in 222 caliber. 26 grains of 748BR pushed 53 grain Sierra BR bullets. Myles Hollister also chose a .222 Rem. with a Hart barrel, Redfield 24X scope, 22.2 grains R-7, Sherman 51 grain bullets. Myles was second with .2854.

Top 5 100 Yards

1. R. Raide 2458
2. Myles Hollister 2854
- *3. John Hollister 2946
4. E. Hodgins 3380
5. R. White 3660

Top 5 200 Yards

- *1. John Hollister 3109
2. R. White 3598
3. C. Lynn 3643
4. E. Hodgins 3676
5. H. Dixon 3679

Top 5 Grand

- *1. John Hollister 3027
2. R. Raide 3414
3. E. Hodgins 3528

(Next page please)

WICHITA RIFLE REST

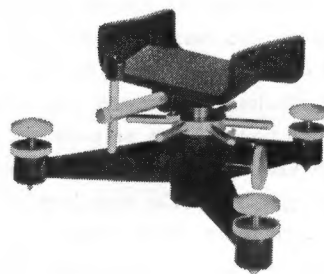
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Chrome plated hardware - hardened pointed levelling screws
Non-rotating and contoured nest to prevent sand bag from moving
Fully-adjustable fore-end stop - 5 1/2" horizontal - 3" vertical
Total weight 11 pounds, 8 ounces

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P. O. Box 11371, Wichita, Kansas 67202

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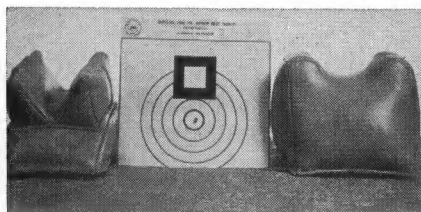
4. R. White 3629
 5. M. Hollister 3658
 Young John Hollister did a fine bit of shooting in taking the 200 yd. and Grand Aggregate. We all salute him.

**CENTRAL PENNSYLVANIA
 RIFLE CLUB, INC.**
 Dauphin, Pa.
**IBS REGISTERED
 HUNTER RIFLE SHOOT**
 August 22, 1971
 31 Competitors
TROPHIES

Master	
1st Master	
John A. Miller	248-7
2nd Master	
Jay Kohl	245-10
Hunter	
1st Hunter	
Dale Flaharty	249-14
S. Joseph Lesley	243-6
Novice	
1st Novice	
Robt. G. Smeltzer	232-6
Chas. D. McElwee, Jr.	243-6
High Jr.	
Tom Cochran	225-2
Robert Reinoehl won the "Precision Shooting" Warm-up Patch, 49-3X.	

EQUIPMENT

John Miller—308 Rem., Hart barrel, Weaver K6 scope, 168 grain Sierra bullets, 40 grains of 4895 powder.
 Dale Flaharty — 308 Winchester, Win. barrel, Herters 168 grain bullet, 40 grains H380, Redfield 6X scope.



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Pictured is the #2 Protektor Model Set with the famous Rabbit Ear rear bag. It is a favorite of many Varmint, Sporter and Hunter Class bench rest shooters. No mechanical rest or pedestal is required in front. Priced at \$10.50 per set—Single Rabbit Ear rear bag at \$7.50; front bag only, \$4.00. Bags are available for immediate delivery. Five different other front bags and nine styles in all are pictured in a free brochure. Basil Tuller, Galeton, Pa. 16922.

**ORIGINAL PENNSYLVANIA
 1000 YD. BENCHREST CLUB, INC.**
 Williamsport, Pa.
OFFICIAL RESULTS MATCH #6
 August 8, 1971
GROUP

Match	
1 Frank Popp, Jr.	13.563
2 Chet Leach	14.062
3 Bill Jodun	15.125
4 George Kreisher	17.125
5 Jon Smeigh	13.500
6 Guido DeVito	13.312
7 Tom Drummond, Sr.	22.500
8 Walt Bryan	25.250
9 Dan Anthony	19.125
10 Harold Rice	13.187
11 Pete Romani	18.813
SCORE	

Match	
1 Paul Dewalt	46
2 Bill Cran	42
3 David Dubble	45
4 Don Strawser	42
5 Joe Kertesz	43
6 Howard Hagerman	43
7 Ken Reeder	34
8 Bill Miller	38
9 Bob Buck	43
10 Jack Arnold	43
11 Howard Wolfe	45
GROUP SHOOTOFF	
Top 2	
1. Guido DeVito	12.000
2. Walt Bryan	15.500
SCORE SHOOTOFF	
Top 2	
1. Bill Miller	47
2. Paul DeWalt	44

* * *

OFFICIAL RESULTS MATCH #7
 September 12, 1971
GROUP

Match	
1 Bob Murtoff	12.187
2 Boydell Theis	10.875

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 VARMINT SHOOTERS**

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3 Bill Martin	11.625
4 Pat Bonnell	11.437
5 Trudy Miller	11.062
6 Mick Leach	11.562
7 Tony Mariano	14.187
8 H. Hagerman	10.750
9 Stewart Chronister	15.750
10 Rick Graner	12.125
11 George Reeder	14.000

SCORE

Match	
1 Clair Hurst	46
2 Ken Reeder	45
3 Howard Wolfe	48
4 Ray Guinther	44
5 Rich Moorehead	44
6 Rick Taylor	46
7 Bill Hurst	45
8 Willard Nelson	47
9 Cliff Hocker	44
10 Pete Dewalt	47
11 Hubert Hakes	39

**GROUP SHOOTOFF
 Top 2**

1. Mick Leach	10.4375
2. Bill Martin	11.8125

**SCORE SHOOTOFF
 Top 2**

1. Willard Nelson	43
2. Ritchie Moorehead	41

Letter to The Editor

F. W. MANN'S 6000 FPS

A bit of supplementation to the information conveyed in Dr. Mann's letter of October 30, 1916 to Harry Pope would likely be of interest.

George Gouse of Hudson, N. Y., a tool and die maker, riflesmith and shooter who passed on within the last few weeks and was then a young man for whom Mr. Pope had high regard, and this writer were in the Pope shop on an occasion in the summer of 1934 or 35 when, apparently apropos of nothing, Harry said: "Mann got six thousand." Something apparently interrupted him because he did not amplify the statement at the time. However, George evidently followed it up on a later occasion because he told the undersigned that the cartridge case Mann had used was a .405 Winchester necked to .30 caliber—and absolutely nothing else about it.

Mr. Pope's notes (on the letter) are interesting in that they provide an example of his insistence that he have a precise "feel" of the magnitude of the figures he happened to be considering at the time. On a later visit to the shop Harry mentioned that comparatively few people had any conception of the small amount of force exerted against a breech block or bolt face even with high pressure cartridges. To make his point he did not talk in approximate round figures, but then and there measured the maximum i.d. of a cartridge case and computed the force with a slide rule. Maybe that habit of mind was just another element in making him one of the outstanding masters of all time.

Dermot C. Reilly
 445 Western Ave.
 Albany, N. Y. 12203

Hang the Expense . . .

(Continued from October issue)

So, we are going to assemble three rifles for our boy for the two light classes. We'll tackle the sporter first. The equipment listing at last year's Nationals makes this easy. Ring up Lafayette, New York, and proceed to tell whoever answers (the whole family talks the language) that you want a sleeved model 700 Remington action, in 6x47 caliber, with a 14" twist barrel. Use the 2 oz. trigger, in a three piece laminated stock, set up for the Lyman 25 power target-spot. Why the 700 action? Because the 40-X is too heavy when sleeved, and the 660 just doesn't inspire a feeling of confidence (this latter is probably psychological rather than factual). Why the 6x47? We've discussed before the problems with it, but right now it's the best available. Why the 2 oz. trigger? Most of our better light gun shooters use a light contact hold, or even a no contact hold (this is in terms of shoulder pressure at butt-plate). If you have a relatively heavy trigger, you are going to move that rifle at a most inopportune time. Why the Lyman? Because they don't make the shorter lighter scopes in 25 power with the .0005 crosswires.

On to the light varmint. Ring up Ted Boughton in Rochester, New York. Tell him or Arline (whoever answers) that you want a Hart action, with a short heavy barrel, in .222½ caliber. Add a 2 oz. trigger, a laminated stock, and set up for the Lyman 25 targetspot. Why the Hart action? Because it has a long record of successful usage, is extremely well made, and is readily available. Why the .222½? For a little more velocity over the 200 yard phase.

Now for the back-up, the ace in the hole, just in case our boy gets ham-handed and drops his rifle the day of the Nationals, or in case one of the other two rifles suddenly takes it into its head to stop shooting just before the match. So we'll order a 40X-BR in 6x47 caliber, with the 20X Remington scope topside. This will serve as a back-up for both classes, and in our practicing next spring, we'll keep a record on its groups, in case it turns out to be a closer shooting rifle than either of our first line choices. These 40X-BR's have done amazingly well in the hands of people such as Jim Stekl and Mike Walker in the past few years, and there is ample justification for believing we should have one in our battery.

Finally, the heavy varmint class, and we are probably going to need a finish in the top ten here, and preferably higher yet. So we will have two rifles built, exactly alike. Each will be based on the Hart varmint action, with scope bridge extension, and using the Hart 2 oz. trigger. Each will mount Lyman 25 powers with .0005 crosshairs, and they will each be based on the Hart three piece laminated varmint pat-

tern stock, with as flat and wide a fore-end bottom as possible. One will be in .222½ caliber, and the other in .308. The battle plan will be to fire the .222½ at 100 yards, and take a look at weather conditions the following day when 200 yards comes up. If the wind is not acting up, we'll stay with the .222½, relying on its slightly increased velocity to give it a slight edge over the standard .222. On the other hand, if the wind is moving at any appreciable velocity, we'll go with the .308.

It would seem hopeless to try and get our hero to master a 10½ lb. .308 in three months, but hopefully we can achieve something with the heavier 13½ lb. gun. If it turns out in our practice over the three months that he just can't handle the .308, then we'll have to abandon it entirely; but it would be another ace in the hole if he could master it. Indeed if he does learn to shoot it well, we'll pray for a tornado to hit during the 200 yard stage.

Now to lay in a few supplies. Better order about six thousand .22 caliber Detsch bullets, six thousand 70 grain 6MM Detsch bullets, and 3000 Sierra 168 grain 30 caliber Internationals. A couple of Lyman 20 powers with fine crosshairs, in case of heavy mirage running (instead of the 25X's).

We have avoided anything in the new wildcat field, or anything experimental. What we've assembled is the best available of what's available right now. Exclusive of loading components, we've spent about \$4500 for five rifles and five scopes plus two reserve scopes. A good guess is that we will spend about \$500 on loading equipment. So, a \$5000 investment for a shot at the Nationals, a year from now.

I'll be the fellow sitting next to a tent full of twenty dollar bills, chewing on antacid tablets.

PRECISION STAYNLESS STEEL MATCH TARGET BARRELS

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Chambering Reamers for Obsolete Calibers

I am giving you herewith my drawings of finishing chambering reamers for obsolete calibers .25-21 and/or .25-25, .28-30-120 Stevens, .32-40, .38-55, and a special .40/38-55 case for newly fitted .40 caliber barrels. These are all fairly complete in all details. They are, however, all designed for seating the bullet into the bore ahead of the case and chamber. For fixed ammunition all you would need do is to change the 12-15° to 25 or 30° and add your 3 to 5° ball seat.

None of these reamers has the rim recess cutting counterbore integral with the body of the reamer. This operation is done separately with a boring tool, or a special counterbore fitted with a depth stop.

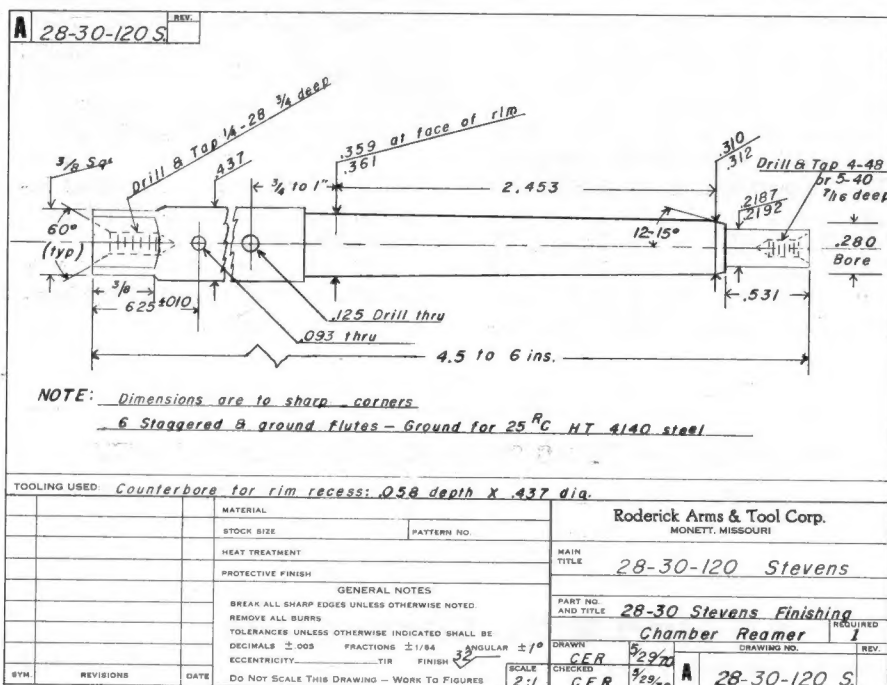
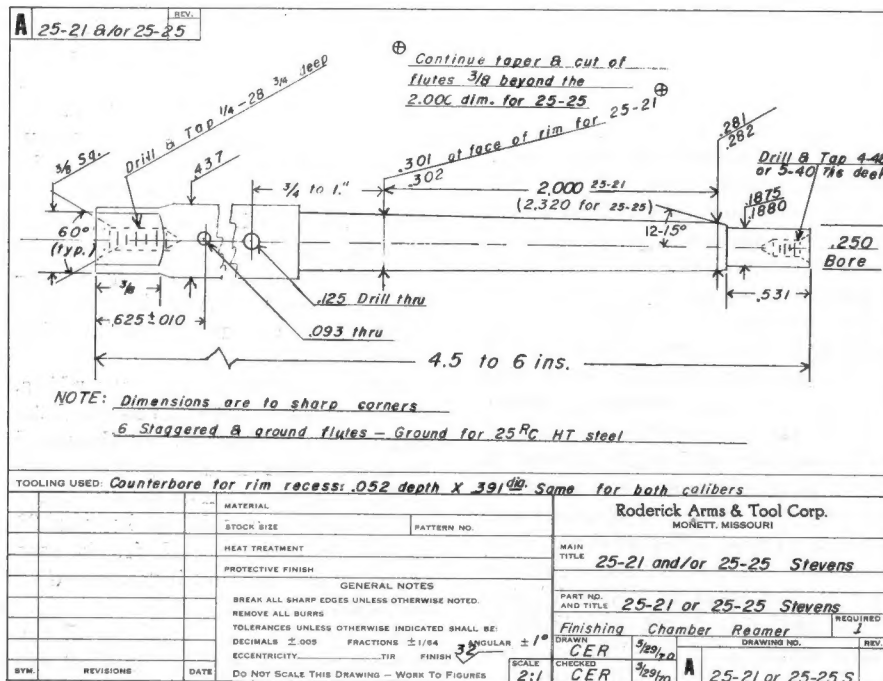
The ".125 Drill thru" callout in the drawings in the shank of the reamers is for a chamber depth stop collar retaining pin, and the ".093 thru" is for a soft piece of stovepipe wire to be placed through the reamer shank and acts as a shear pin if the reamer should get hung up in chambering.

When fitting your chamber depth stop collar ADD the counterbore depth for rim recess as shown on the drawings to the face of the rim callout and where the chamfer at the front of the chamber starts PLUS whatever clearance you want for the cases—usually .015-inch. All reamers are arranged for use of interchangeable pilots.

The 12 to 15° chamfer at the front of the chamber is made a slow taper to keep from shearing a ring of lead off the base of the bullet when you are seating it past a chamfer steeper than 15 or 20°. The base end of your bullet should be seated flush with the front of this chamfer or not over .005 to .010" beyond.

The .40/38-55 chamber when fitting up and chambering a new .40 caliber barrel could very well be made shorter than shown in the drawing thereby giving much less air space in reduced loads of smokeless powder. The slow body taper of only .010" total on diameter is sufficient taper for easy extraction with reduced loads.

Some new .40 caliber barrels have been chambered for the .30-40 Krag case cut off at the shoulder making it about 1.750-inch overall length, and roughly .415" diameter at the mouth of the case. This is a good solid



head case with sufficient powder capacity after cut to 1.750" OAL for the heavy .40 caliber bullets and a minimum of air space with reduced loads of smokeless powders. After these cases are cut off at the shoulder the wall thickness will be heavy and should be cut down to .008-.010" thickness back for a distance of approximately one-half inch from the end. This is to help them expand and gas seal when firing reduced loads.

Note the .340-.342" diameter at the front end of the chamber on the .32-40 drawing, and then refer to my drawing of the .30-222R chamber in the August, 1971 issue of this magazine. You will note that they both are the same at this location and the .222R case has plenty boiler room to push a 200 grain .32 caliber bullet and a lot less air space than the standard .32-40 case when using reduced loads of smokeless powder. This is to be used ONLY when fitting up and chambering a new barrel in .32 caliber, and NOT to cut off some fine original .32-40 chamber in a good barrel.

The .33-47 chambers are usually the same as the .32-40 was before re-boring to this larger caliber with very few exceptions. Pope's .35 caliber chambers that I have examined used the .32-40 Winchester case expanded to .375" diameter at the front end of the chamber with a straight taper back to the original .32-40 case diameter just ahead of the rim. Pope's .39 caliber chambers usually used an expanded (straight body taper without the original very small bottleneck) .38-72 case.

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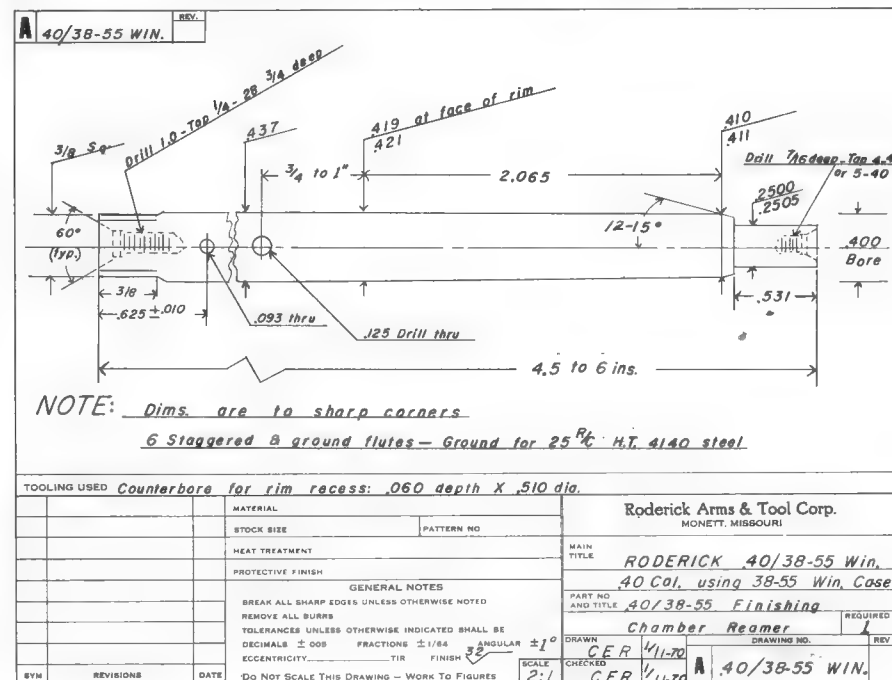
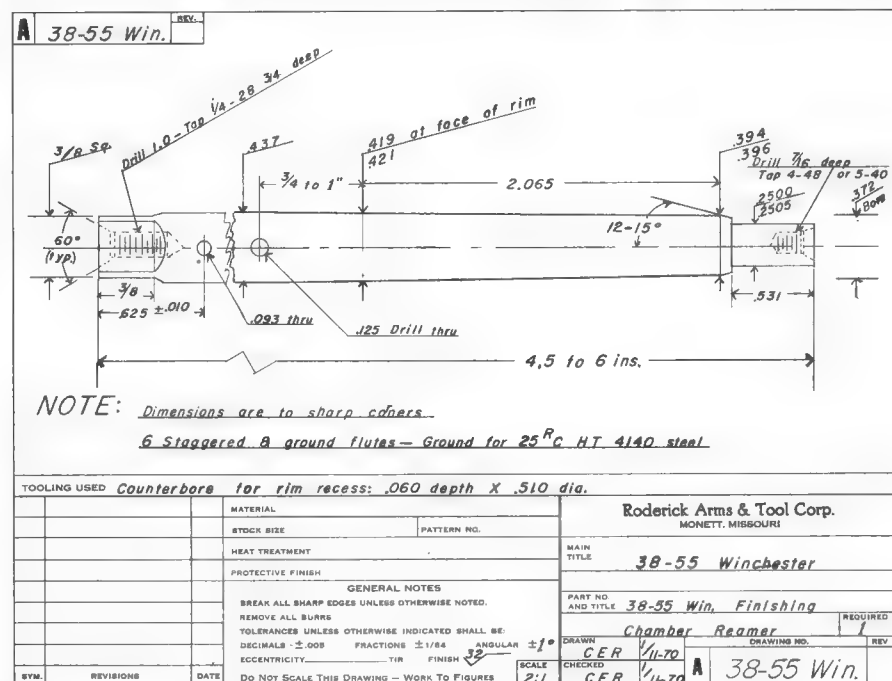
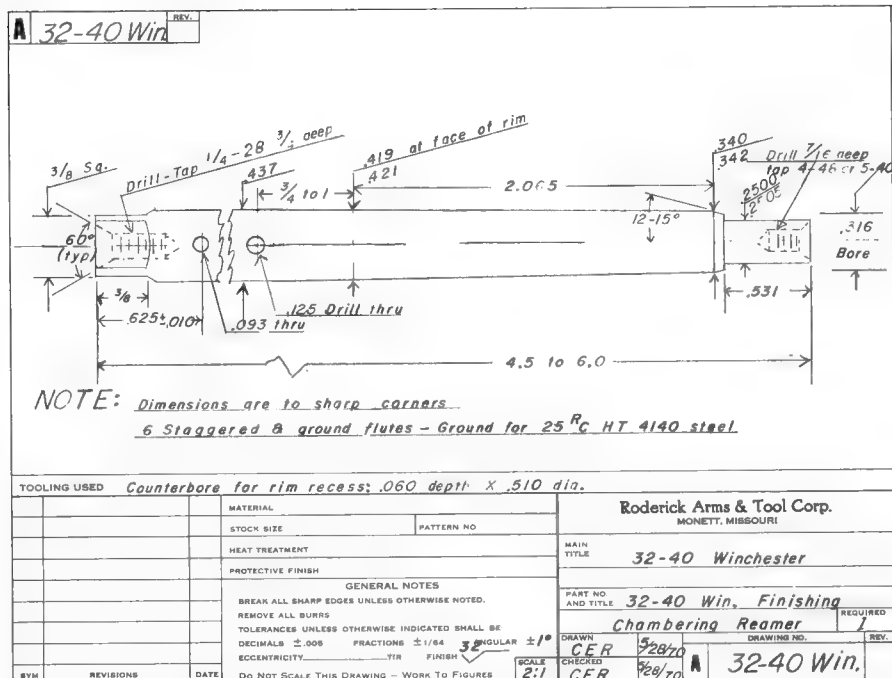
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In Defense of A Sport



Vic Auer

Belly Floppers and Body Contortionists. Such are the words (there are more) with which position shooters and prone shooters poke fun at each other's sports. It's all part of an age-old rivalry, good natured and healthy until the comic-strip verbiage takes on the illusion of truth in the attitudes of one group of shooters toward the other. Then the damaging innuendo begins, and it's the shooter who is eagerly trying to learn who suffers most. But the real harm is done when a great and respected rifleman is led into printing conclusions that the mental and physical attributes required in one sport are inferior to those required in his own. The two sports require different abilities, and are not even comparable. A dog-racing enthusiast might just as well say that the hunting ability of your Irish setter is inferior to the racing ability of his greyhound because it has shorter legs.

Gary Anderson in his July article in P.S., PRONE POSITION, states that "Its (prone shooting's) dependence on quality equipment means every shooter has a control over his results that is not limited by factors like natural ability, age and training time; even though this control often does end up being equated with the amount of money spent on equipment." Also: "Its low practice requirement suits it ideally to the recreational weekend shooter . . ." Bold

face mine. These two statements have no basis in fact, and yet Gary uses them to conclude that "these same factors tend to argue against prone shooting's inclusion as a serious competitive sport at the Olympic and World Championship level where the sole objective is to choose sports champions on their personal ability to perform and not on the ability (sic) of their equipment." Gary goes on to make the comparison of a prone shooter's equipment to an auto racer's car.

The disturbance and dismay with which prone shooters greeted this article have sent a good many rumblings through the prone sport in this country and abroad. I've heard such reactions as "It's untrue and unfair," "He's a great shooter—surely he knows better," "It really pulled the rug out from under things, didn't it?" It seems to me that Gary is just begging for a rebuttal from one or more of the two-to-three thousand active prone shooters plus at least twice that many inactive prone shooters in this country, and perhaps among the countless shooters in New Zealand, Puerto Rico, England and elsewhere is someone who would also like to make a contribution.

Cost of Equipment

First, a good prone rifle costs less than an adequate position rifle. The Winchester Match .22 Free Rifle with most accessories retails for \$385.00 in the U.S. as opposed to \$167 for the best Winchester Match prone rifle. The accessories necessary to position

shooting that are useless in prone should also be considered, such as butt hook, butt extension assembly, palm rest, kneeling pad, high-rise scope stand, adjustable forehand rail, and adjustable rear sight rail to equalize eye relief in the various positions. Many position shooters minimize some of these adjustments through the additional expense of maintaining a second rifle for prone. A good custom prone stock will cost less than a tailored position (thumb-hole) stock of equal quality. And, properly bedded, a factory Remington or Winchester barrel and action will shoot as well as your more expensive custom and/or European combinations used in position shooting. For example, all my shooting for the past sixteen years was done with one Winchester factory barrel, during which time I'd had it twice rechambered and about four times rebbed. It's very important, of course, to keep one's equipment in good condition — which should be done in any sport. Anyone wishing to check the cost of equipment in prone shooting against position shooting can do so simply by sending for the catalogues of representative dealers and manufacturers and comparing same.

A Different Sport

Second, Gary's "low practice requirement." This statement is false, and would surely be passed over with a laugh by most prone shooters were it not that it comes from so reputable a person. Suppose we imagine a fine skeet shooter using the principles of his sport to advise the striving position enthusiast; then to tell him that it requires little practice because the excessive dependence on equipment to shoot at a stationary

By VICTOR AUER

target limits your personal ability to perform, and that this tends to argue against the inclusion of position shooting as a serious international event. This is what Gary has done with reference to prone shooting. Gary described the prone game as a sport that involved no personal ability beyond the requirements of its position. He might just as well have relegated the sport to a gallery event that took place solely in an environmental vacuum.

Prone shooting is a totally outdoor sport, performed, among elements, requiring an entirely different form of training from position shooting and, believe me, once the learning prone shooter suffers through the fundamentals of the position his problems have only begun. The English (Prone) Match as an Olympic and World Championship event attests the fact that prone shooting is a widely recognized and distinct and individual sport. Its problems are unique, and the mental and physical skills one must learn in mastering them diverge rather early from those of the three position shooter.

Actually — and this is an important concept — in some respects the prone shooter has more in common with the skeet shooter. The position is important to both, of course; but what is seldom realized by other sportsmen is that the prone shooter's aiming point is not really stationary. His aiming point is "moving," for he must constantly aim at different points on the target to compensate for the ever-changing wind and mirage conditions. This is tricky, much more tricky than if you took away his invisible wind and shimmering mirage and, to compensate, merely moved his target around. In this sense the term "prone shooting" (as used in the U.S.) is a misnomer, for the prone position is less than half of what it's all about. It can be said that position and pistol shooters are most concerned with *how* they get each shot off, that skeet, trap and running boar shooters are most concerned with what they shoot *at*, and that prone shooters are most concerned with what they shoot *through*. In this sense the English Match is the most unique of all the international shooting events.

Conflicting Objectives and Techniques

"The name of the game is wind doping!" wrote Betty Summerall Duncan in the 7/69 issue of P.S. And most prone shooters have heard some variation of the old maxim that "It's the wind that separates the sheep

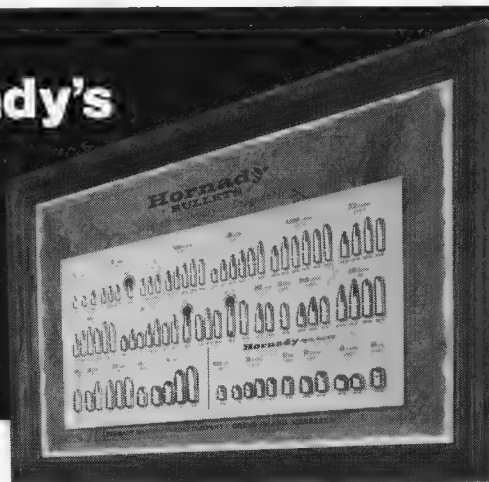
from the lambs." The experienced prone shooter enjoys a good workout on a hilly range where the subtle light or heavy breezes blow from behind, swirl sideways, and cut across the target butts to raise an occasional dust devil. He also likes a wide open range where he can test his body coordination against his ability to read the heat waves, which bend the sun's rays to produce a moving illusion of a target in much the same way a spoon appears to bend in different directions if you put it in a glass of water and turn the glass around. Mirage often reverses directions independently of the wind, and can distort the target image upwards or sideways several times during the same match. In a few seconds, the unaware prone shooter can be caught in a wind change that will move his sensitive .22 bullet a good half inch or an inch outside the ISU .49 inch ten ring at 50 meters — and this is in the best conditions. These elements are the prone shooter's battlefield, his real challenge to his personal performance, and where he must gain his edge over other competitors in a match.

The position shooter's main objective is in direct conflict with this. The top-notch position shooter gains

his edge in a match by how precise his hold is while sighting and squeezing off his shot in the kneeling and standing positions. For this reason, the position shooter wants to practice in the dead of evenings or on a range that is built with partitions, walls and/or screens and embankments which shield him from wind (1) so that his position won't be blown around, and (2) so that the wind down range is obstructed enough to give him a clear idea of how well he's holding. If the range doesn't provide partitions on the firing line he'll often make them and set them up himself. Dry firing indoors is an important part of the position shooter's training, where he can practice breathing, pulse and muscular control; yet the only dry firing that most prone shooters do is on the range to practice their timing in the shifts and lulls of wind. In Eastern Europe, Rome, Mexico, South America and Japan an attempt was made to simulate gallery conditions under an open sky. And, unfortunately, the English Match was usually held on the same range to save the cost of building a second range. Yet wind exists always, and knowing how to use a blade of grass can be worth

(Next page please)

Own Hornady's handsome bullet display board



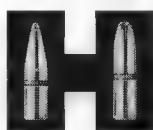
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several points anywhere. The good prone shooter is uncomfortable until he sees at least a little mirage. But wind can throw a position match wide open. For every position shooter, the greater the wind, the greater the luck that's involved in winning.

For example, if an offhand shooter can manage to hold all his shots in the nine ring, he can assume that approximately one third his shots will be tens and that this will be sufficient to win most international events. For this reason, his every mental and physical effort goes into obtaining a relaxed stability and endurance in his hold and a delicate precision in his trigger and sighting techniques. If he gets an eight that he believes might be partially due to

wind, he will normally wait a minute before starting his next round. He knows he requires seven to fifteen seconds to get his next shot off, and if he first corrects for a little wind he is unsure of, the wind may turn on him during those next several seconds or combine with his hold and sight-change to give him an eight on the other side. Therefore, he won't change his sights unless, after waiting, he gets two or three bad shots in the same area. This technique would quickly lose a match for the prone shooter. The wind is an old, familiar friend of the prone shooter, and he will often adjust his sights in advance of this wind change and lie in wait for it. A prone shooter in top performing condition tries to predict the wind before he shoots, and then gets his shots off in two, three or four seconds usually. I would estimate that a fine offhand shooter might risk 5-10% of his attention to wind at 50 meters, whereas every facet of the prone shooter's technique is designed to assure him maximum concentration in wind and mirage.

This was forcibly demonstrated to me in Cali, Colombia this summer as I was scoping Major Lones Wigger's kneeling stage of the three position event. Lones is a remarkable rifleman, one of the very few ever to combine a world reputation as a prone and a position shooter, so I was surprised to find myself calling his kneeling shots before he fired them—i.e. 9 at 10 o'clock, 10 at 10, 10 at 4, 9 at 4 o'clock. . . I mentioned this to Colonel Pullum (certainly the finest position coach this country has produced) who was also watching. Said Colonel Pullum, "Well, in position shooting you just can't sacrifice much position control in order to work the wind." Very true.

Thus an entirely different set of skills emerges in prone shooting, requiring a far finer understanding of the complexities of wind in order to compete with relative success, and requiring at least as much practice, study and experience to learn. It's in his special approach to wind doping, for instance, that the prone shooter's techniques of position must be determined and refined, plus all the related aspects such as breathing, sighting in, sight alignment, and trigger squeeze. Speed in reloading and "waiting out" conditions or speeding up one's shots (timing) are vastly more important in prone shooting. Reading mirage, the wind on one's face and the angle of the flags—these can be followed by some po-

sition shooters to the limited extent that their intricately demanding positions will allow; yet this is the heart and soul of prone shooting. "Snap" shooting, an anathema to a position purist such as Gary Anderson, will become necessary in torturous winds to the prone shooter who is determined to win. Picture the offhand shooter as a delicate, human instrument as he breathes and balances his rifle five and a half feet above the firing line, precise as a micrometer on a measuring stand—and then ask him if he'd like the fan turned on. Yet shooting that little wind-sensitive .22 bullet over riverbeds and ravines during a summer midday can be exciting to some prone shooters, discouraging to others, and usually dramatic. The winner of a big prone match has put in literally thousands of hours of practice.

Age, Sex and Natural Ability

Third, Gary states that prone shooting "is the least discriminatory as to age or sex." And that, "every shooter has a control over his results that is not limited by factors like natural ability, age . . ." I strongly question this. August Hollenstein was in his fifties when he fired the present world standing record of 376 at 300 meters during the European World Championships at Oslo in 1963. Captain Margaret Murdock came within one point of tying that same record during the 1970 World Championship at Phoenix, and she is undeniably female. On the other hand, I don't find any open U.S. or international iron sight records held by older shooters, or by women, in prone shooting.

I submit that there may be more evidence to suggest that age is a less limiting factor to the position shooter, than to the prone shooter, when iron sights are used.

"It is the eyes that go first," says Floyd Day who, as superintendent in charge of optical work for Hale Observatories, has also been an active rifleman for more than thirty years. "As you get older your eyes don't accommodate as well. Accommodation is being able to adjust your vision to any distance, and your eyes gradually lose their capacity to focus at different distances."

Now let's consider the job that our eyes do for us in position shooting versus prone shooting. The offhand shooter rests his eyes while assuming his position for the next shot. When his position feels right, he opens his eyes to test the line of his sights with the bull. He may rest his eyes as he begins his squeeze, but concentrates

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on a good "picture" of sights and bull during the final moment of his shot. The prone shooter, however, often stops squeezing to check flags, weeds or the mirage through his scope. He must constantly refocus his eyes at different distances and more often and still be able to adjust his eyes quickly to his sights. For this reason, it's my belief that young eyes and rapid visual accommodation are more important to the prone shooter.

The most distinguishing virtue of position shooting is in its physical orientation — and, with variations, in this way the shooting sports operate in reverse from every other Olympic sport. All track, gymnastic and swimming events require the sudden or prolonged excitation of voluntary and primary muscles, while the good shooter must learn to relax and isolate these muscles so that he can concentrate on learning to control his involuntary reflexes and responses. The beginning shooter is usually startled at discovering aching muscles which he never knew he had. As he gradually develops his skills he learns: to control his breathing, to actually will his pulse to slow down as he squeezes the trigger, and even to exercise control over his nervous system. Emotional attitudes are extremely important. The fact that acute control of these can be learned is one of the year-after-year attractions of shooting to competitive men and women as they mature, grow older, and become more selective in the choice of a sport.

In position shooting these involuntary responses are controlled with respect to the positions primarily, whereas in prone shooting the position is used as the base from which mental control of the physical attributes is directed toward competing in wind and mirage conditions where speed in the use of breathing, pulse and eye accommodation, for instance, is essential.

Two-position Shooting

Gary Anderson's attitude toward the prone sport reflects the point of view of many position shooters who feel forced to shoot prone as one of their three positions. The general approach of the position shooter in a position match is to "get by" in prone, and losing some points to prone is considered par for the course. It doesn't worry him. His match is won in the standing and kneeling positions where the spread of points is naturally greater. The form of the prone position is studied, and

little attempt is made beyond training for a nice hold.

In this sense, prone as one of the three positions is superfluous. It's little more than a sighting-in match for the position shooter, and Gary might receive much support in suggesting it be cut from the position-match program. But he shouldn't dis-

credit or suggest cutting out an entirely different sport in the process.

The exponents of two-position shooting remind me of the synchronized (water ballet) swimmers who are judged by their body forms in the backstroke, breaststroke, and freestyle positions. Many synchronized

(Next page please)

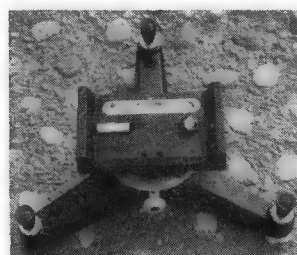
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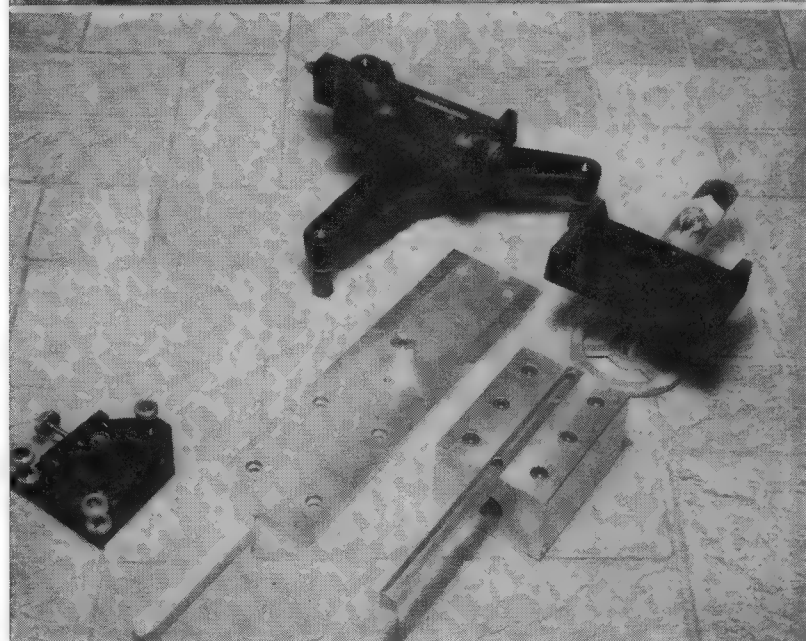
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swimmers tried to get the judges' emphasis on the freestyle position reduced (for while their event can never be won with points gained in the free position, it can certainly be lost). The freestyle event swimmer, however, couldn't care less about form except as it helps his speed in overcoming the element of water. This doesn't make the freestyle swimmer any better, or any less important, nor does it suggest any reason why his event should be eliminated.

Many position shooters would like to see their events judged on the basis of 20 shots prone, 40 kneeling, and 60 offhand. Many position shooters have also told me that they think the prone shooter's ability could be better judged by doubling the English Match course from 60 shots to 120 shots.

The Soviet Influence

Gary is beyond all doubt one of the finest 300 meter and 50 meter position shooters who ever lived. He has also demonstrated a wind-doping capability as a position shooter.

However, many prone shooters who have seen Gary shoot prone have been struck by his full cant, his extreme rigidity of neck and shoulders, with little fluidity of motion after releasing his shot. This is due I think to the high shoulder of his trigger arms, which inhibits him from rolling his movements together between shots to allow for an easier, faster play with the wind. Gary has done this on purpose, sacrificing easy movement for rigidity. I've seen Gary hold in prone as well as anyone I know, but most prone shooters who have been influenced by Soviet and Estonian styles have had to make innovations which allow for freer

movement when working with wind and mirage. This is why the Soviet/Estonian styles, as imported, have had to undergo alterations.

Fifteen years ago our military training program was stimulated to outshoot the Soviet Union in the Olympics, and it succeeded beyond all expectation. In the process, many techniques and training methods were borrowed from the Soviet Union, and I think some pressure at that time was felt by the U.S. Olympic Committee to pattern our method of team selection after the Soviet Union's.

Olympic regulations allow four shooters to represent each country in the combined 300 meter position, 50 meter position, and English (Prone) Match. These are individual events only. Two individuals shoot each event. As the U.S. method of selection stands today, all four shooters sent to the Olympics are position shooters. Two of these position shooters are then assigned to shoot the English (Prone) Event. Now, while a few of our position shooters are excellent prone shooters, I see no reason why our U.S. Olympic Committee can't send three shooters to shoot the two position events, and select one prone shooter from an English Match Try-out to shoot his own prone event. Most of our military shooters who do not number among the top six or seven position shooters quietly agree with this point of view. It is the physical and mental nature of some of our so-called military position shooters to be able to compete better in the prone sport, and they find the method of Olympic selection a truly disheartening situation, as does practically every civilian shooter in this country who would otherwise have the opportunity for trying out for the Olympic event that was originally designed for him in his own sport.

Prone shooting is not a popular or civilian sport in the Soviet Union, as it is in the English-speaking countries of the world. The English Match is almost never fired in the Soviet Union, just as the 300 meter event is practically never fired in the U.S. except in an international try-out. The reasons for this are partly due to our different cultural developments as they relate to sports, partly due to the high cost of 300 meter ranges, ammunition and equipment to the individual consumer in the U.S., and in large degree due to the recreational needs of what we call our sportsmen.

Recreation derives from "re-create," each person creating his own values in his work, and re-creating these according to the spirit he puts into his pastime. In Western Europe, Australia and Canada, for instance, the sportsman feels the urge to try new things, is inventive, creative and individualistic. This concept doesn't really exist in the Soviet Union, where every enterprise is programed by the state. The better the shooter performs in the Soviet Union, the better home and food he and his family are provided. Survival needs are stronger than recreational needs. Pressure is also greater in communist countries, which helps explain why there were eight Cuban defections and two Cuban suicides at the 1971 Pan American Games.

I believe that we should hang onto our own cultural heritage, and recognize the individual's challenge in sports as much as possible.

Different Recreational Needs

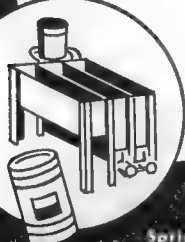
There is a friendly snub in the old phrase, "the weekend shooter", which has discouraged many promising shooters from considering themselves worthy of further competition. There is an element of tragedy in this, especially when the phrase has been misinterpreted. The nature of the prone game requires the sun and open air, and so almost all matches are scheduled on weekends. This is one of the major attractions of the sport, and one of the reasons why more competitive people have the opportunity to take this sport seriously.

And yet Gary Anderson wrote of the prone sport as suited "ideally to the recreational weekend shooter who is lucky to get on a range once a week." And he concluded with this as one of his factors that "tend to argue against prone shooting's inclusion as a serious competitive sport at the Olympic and World Championship level . . ."

Now, almost all of the best pistol, big bore, and prone shooters I know are recreational weekend shooters. Some are driven to shoot because of their competitive instincts, others because the social-technical-competitive mixture makes them feel alive—and these can be sharper spurs to improvement than any monetary reward. Most are civilians, but because a man has an eight-hour-per-day job doesn't mean he can't apply and master the skills of a specialized sport. Multiply those weekends by five, six or ten years and you've got a lot of practice — perhaps more hours

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of practice than many 16-18 year old swimming and gymnastic champions. Furthermore, most skiers, equestrians and even weightlifters in this country never practice more than once each week with full equipment, unless they're preparing for a big tournament.

The best time schedule for practicing a sport is determined by the sport itself. Since most big prone matches are on weekends, weekend practice is a necessity for the prone shooter, and this is when he should simulate match conditions while learning and/or testing himself. He should practice in good daylight when the wind is stirring and the mirage is more visible, and sleeping and eating habits should be developed accordingly. For position shooters, early mornings and evenings are best, in the home or when there is little wind on range.

Given equal training time, I believe that the college graduate assigned to a military marksmanship training unit for a few years is usually better able to improve as a position shooter (unless he grew up in the prone sport). Position shooting is body shooting. Ideally, the aspiring position shooter practices holding exercises every day or night. For the prone shooter, jogging, swimming or light-weight exercises that condition the muscles to be limber and relaxed will help. Prone shooting is wind shooting, and the beginner can learn the basic fundamentals of the position in about the same time it takes to learn what to look for in mirage. Then he must learn to judge the direction and velocity of mirage, and how to coordinate his shooting in mirage. He needs to let things coagulate in his mind a few days before analyzing the wind again on range. Prone shooting takes years to grow into.

Using the natural shifts in one's motivation can play a valuable part in learning the prone sport. I believe there are periods when a prone shooter who practices more than two hours twice a week is wasting

his time, or perhaps even hindering further development. He should never saturate his enjoyment, as for example in over-practicing before a big match, but should condition himself to be refreshed and ready. It's a far more subjective sport than position shooting, for the position shooter knows when his hold's gone awry. His target tells him. The prone shooter is never sure, in the wind. Because it's subjective, each person's approach to mastering the sport is very individual, and thus creative. Prone shooters as a group have a reputation for being highly independent. Vocationally, more than 50% of the civilian prone shooters I've known have gone into business for themselves, perhaps because they thrive best on personal motivation.

People's personalities and how they function best in day-to-day life seems to play a large part in how they choose a sport. If they are competitive and enjoy firearms they naturally gravitate toward match shooting. Scientifically-minded people are attracted by the study of powder, metals and ballistics, as in benchrest shooting. Physically oriented people with analytical minds should think in terms of position shooting. If you're an outdoor person with an aptitude in spacial relationships — as in photography, engineering, or sailing — you might enjoy the prone game where you must relate the changing angles of the wind to your line of aim.

So, good sportsmen, let's not confuse prone shooters with position shooters. They learn different skills, they practice at different times. They train differently, they use different equipment, and they prefer different ranges.

And when you hear a position shooter say that wind shooting is luck shooting, or when a prone shooter tells you he gets sleepy with nothing to think about but the weight of the rifle — well, you might kid him along a bit. He is merely judging the other sport by the principles of his own. I think each person's choice of a

sport originates from his unique and fascinating nature as an individual. And I believe that he, and his sport, should be given every encouragement and incentive which they deserve.

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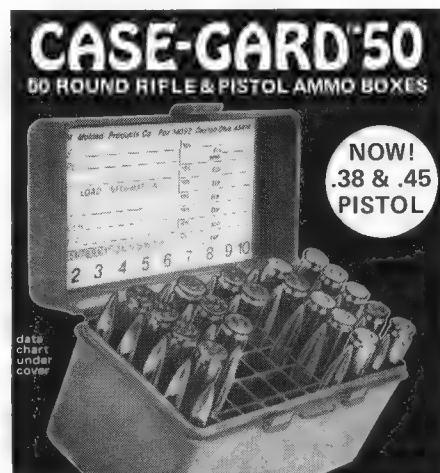
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The Rifleman's Corner

By GARY L. ANDERSON
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Is Prone Really Unique?

In the July issue of P.S., I made a few short comments about prone competition as an introduction to an article on the prone position. I voiced my own feeling that prone is ideally suited to be a recreational sport as opposed to a serious international and Olympic sport.

Pan American Games English Match gold medalist, Vic Auer, who happens to be one of this country's better prone specialists, has written a rebuttal to these comments. This I am glad to see because I think it is this kind of dialogue between persons who respect each other that will lead to a real progress and a sounder future for our shooting sports. I hope you have read his arguments carefully.

Because I did not develop my ideas about this subject at length in my July article, I would like to use my commentary on Vic's article as a vehicle for more fully expressing my own thoughts.

In his article, Vic quickly states the basis of his entire argument: "The two sports (prone and position) require different abilities, and are not even comparable." He repeatedly argues that the mental and physical skills a prone shooter must learn are unique and not found in position shooting.

In my own comments in July, I also argued that prone shooting is unique, but for different reasons. To me, prone shooting is unique because having the very best rifle and ammunition means more to the prone shooter than to any other competitive marksman. The man who wins an Olympic gold medal in the English Match is determined as much by how good his rifle and ammunition are as by how good he can shoot. This is because prone positions and wind

doping techniques have been consistently able to out-perform most of the target rifles and ammunition available.

I also stated that the amount of training time needed to master the prone position and the skills of wind doping to the extent necessary to be a prone champion do not require nearly as much training time as does three position shooting. Vic apparently agrees with this when he says, "There are periods when a prone shooter who practices more than two hours twice a week is wasting his time."

Because of these factors, I expressed my own feeling that prone shooting was not ideally suited to be an Olympic or international sport, even though it was ideally suited to be a mass recreational sport for the same reasons. I point out that this is an ideological argument. Olympic sports to me are pure sports in the sense that the attempt to identify the best in the world in Olympic events should be as nearly 100% human as possible. An Olympic sport should pit one man's physical and psychological ability against that of all others' and not the ability of his equipment against that of those who can afford or have access to better equipment. True, equipment does make a difference in many other Olympic sports including other shooting events, skiing, cycling, rowing and even track and field; but I know of no other Olympic event except prone shooting where equipment makes winners and losers.

At this point, I can assure you that this is not an attempt to downgrade any sport. Rather, it is an attempt to find an identity for prone shooting that will give it a basis for the mass popularity it deserves. Prone shoot-

ing has, in the last two decades, ended up laboring in the shadow of position shooting to the extent that it has tried unsuccessfully to be to young shooters what international position shooting is — namely a pure competitive sport as opposed to a recreational sport.

An analogy from recent events in my own shooting career might show the difference. I am now retired from active international shooting competition and have become actively interested in high power bolt-gun shooting. To me, bolt-gun shooting falls in the same category as prone shooting. They are both recreational sports.

My sole objective in international competition was winning. It was a blood game. I can say I loved the sport, but I could never say I enjoyed it in the sense that I enjoy bolt-gun shooting. Now I'm finally shooting just for fun, for recreation.

As much as I enjoy bolt-gun shooting, I would insist that it does not belong as an Olympic or international sport for much the same reasons I have objected to the English match. It places a heavy reliance on equipment. The difference between good and average shooters is small enough that an average shooter can sometimes win a match, something he can never do in international courses. It doesn't take nearly as much practice to remain competitive. There is just enough luck involved to keep everyone interested.

I suppose the difference between Vic's viewpoint and mine is that he reacts to these factors as negative while I regard them as positive. To me, these factors make both prone and bolt-gun shooting ideal as mass recreational sports. If equipment makes a difference then someone who doesn't have the advantage of youth or natural ability still has a chance. If luck is a factor, then everyone has a chance to win sometime. If less practice is required, then the man who has a busy work-week and many civic responsibilities can still be good at a sport that fits into his schedule.

The Olympic and international sports belong to the youthful elite who are willing to train and compete for the sole purpose of becoming champions strictly on the basis of their personal ability. Recreational sports, on the other hand, belong to the masses to whom words like enjoyment, friendship and participation mean more than winning. To me, both bolt-gun and prone shooting belong to the latter category and could,

if they were established as such, become more popular than they are today.

Now to deal with Vic's efforts to establish the uniqueness of prone shooting as a suitable international sport: his arguments that wind and mirage and special relationships and youth and visions and fluid motions make prone shooting appropriately unique. The problem that becomes apparent to any experienced position shooter reading his article, however, is that at virtually every point, Vic's attempt to establish a uniqueness for prone shooting separate from position shooting suffers from an inadequate understanding of position shooting.

Many of his characterizations of position shooting are comic and naive. He has an offhand shooter casually opening his eyes "to test the line of his sights with the bull," and then resting his eyes again until "the final moment of his shot," all without ever paying any attention to wind. All his position shooter does is hold and fire, never doing any more to his sights than keeping his group centered, while his prone shooter is valiantly fighting the wind and mirage every moment of the match. He writes off one of Lones Wigger's poorer series of shots to what he thinks is a position shooter's need to be oblivious of the wind. His offhand shooter gets two or three bad shots in a row because "if he first corrects for a little wind he is unsure of, the wind may turn on him . . ." Vic's position shooter regards prone as "little more than a sighting-in match." All his position shooter has to do is "get by" in prone" because points lost there are "par for the course."

The first thing that has to be realized here is that everything Vic said about wind and mirage being special to prone shooting applies equally to position shooting, only with added complications. Vic doesn't seem to realize that the wind is a factor in every shot in every position, and not just in prone. If a kneeling or standing shooter can't dope the wind he just isn't going to be a consistent winner. As Vic said, "wind exists always"; which means that a kneeling or standing gold medal requires just as much wind doping skill as a prone victory.

In many respects, the position shooter must be an even better wind doper. In Vic's excellent article on wind doping a couple years ago, he talked about playing the percentages by staying in the middle of certain

wind variation tolerances. This is possible in prone because the holding capability of the position is smaller than the ten ring and a shooter can miss the wind slightly and still hang a ten on the side. In the kneeling position, though, even the best holds cover the whole ten ring so there are no percentages to play. The wind adjustment must be right.

In kneeling and standing it takes longer to get off a good shot than in prone. A position shooter cannot interrupt his hold as often to check the mirage. This means he must have an even greater "feel" for the wind.

Wind and mirage skills do not make prone shooting unique. Since any champion position shooter must master them and apply them from a base of an even less stable position, these become skills that are common to both prone and position shooting. The reason Vic has placed such a great emphasis on wind doping as the unique aspect of prone shooting is that to be a prone shooter, wind doping is the 'name of the game,' assuming that equipment is equal, of course. But to the position shooter, who must be equally good at wind doping, it is not so prominent because he has so many other things to master in addition. This is also the main reason why prone shooting requires so much less practice.

Vic tries to make us think a position shooter cares little about his prone position scores. The fallacy of that argument is demonstrated by the fact that most of our top international position shooters spend more time practicing than do any of the leading prone specialists in this country. They do care about prone scores. A point lost is a point lost no matter where it occurs. I just hope no young aspiring Olympic position shooting medalist took Vic's conclusion to just "get by" in prone seriously.

I think Vic was also trying to make a case for prone as a sport where young males have a better chance for success. He says August Hollenstein was in his fifties when he set the world 300 meter standing record, and that there aren't any international iron sight records held by older men or women. He cites Margaret Murdock as an example of easier feminine adaptation to position shooting.

First we need to get the record straight: August Hollenstein was 43 when he set the world record in standing, but Kurt Johansson was in his fifties when he set the world 300

meter prone record. Margaret Murdock is just as good a prone shooter as she is in position shooting. She won the Western Wildcat match not too long ago as well as the 1968 National English Match championship. We might also look at fellow P.S. columnist Herb Hollister. Herb is over seventy and he doesn't have a prone competitor in the country who thinks he is over the hill. Try to find a position shooter about whom you can say that!

I was disappointed that Vic did not deal at all with my contention that equipment quality is a major factor in prone victories. Vic did state that basic prone equipment costs less than basic free rifle equipment. Agreed, but this is one negative aspect of current position shooting that could and should be changed by the adoption of a standard rifle for all position shooting.

Actually, this is not the issue. The issue is whether you could win an international championship with any factory target barrel in good condition. The average factory target barrel is good enough to produce world record position scores, but only selected barrels are good enough to do the same thing in prone. When Bill Pullum picked the USA prone team in the 1966 World Championships, he picked the men with the hot rifles and not the men who had the best competitive prone records. His decision helped the USA win two gold medals and set two world records. One of my four world three position championships and one of two Pan American Games position gold medals have been won with rifle-ammunition combinations that would not group ten ring. I know find a prone gold medalist who can of other similar cases. But try to say that!

If prone shooting were so unique it would stand to reason that prone specialists would be much superior in their event. Yet shooting history doesn't bear this out. Almost all of our recent national champions were primarily position shooters. USA position shooters have won three medals in the English Match in the last three Olympiads. Only one of the seven shooters who jointly hold the English Match world record is primarily a prone shooter. This is because the position champion must be a champion not only in kneeling and standing, but also in prone. To him prone shooting is not unique at all, except that it makes his rifle and ammunition selection so much more critical.

Random Shots



Betty Summerall Duncan

By **BETTY SUMMERALL DUNCAN**
8630 Olin Street
Los Angeles, Calif. 90034

One of the most colorful tournaments was the ALL-AMERICAN 6400, a floating Western Wildcats prone tournament, hosted by the Los Angeles Rifle & Revolver Club. It was truly an All-American weekend in southern California, with U.S. flags flying behind the firing line, a concert band playing patriotic music following the Saturday matches, and a steak barbecue, which was popular with shooters and their families.

TOM WHITAKER, 1969 National Prone Champion, demonstrated in the opener, a Dewar metallic, that he is just as rough with irons as he ever was. On the range where he made Master at the age of 16 and where he won the Junior title at the 6400 held in conjunction with the 1964 NRA Annual meetings in Los Angeles, Tom Whitaker was very much in control. Only in the two 100-yd matches did his strength diminish. **John Lane**, 16, took the first —400-20X over a 400-19X by Mary Lou Adler, 14. Whitaker's 399-29X ranked third. **Tom Guerin** had the only possible in the second 100-yd iron, x 26, as Whitaker's 398-20X was runner-up.

Shooting the "old faithful" Hart-barreled 40X, with which he won the Nationals, Whitaker gained a comfortable lead on the first day, aggregating 1598-130X over a 1595-111X by Vic Auer, a 1594-118X by Tom Guerin and 1594's by Joe Specht, Reno, Nev.; Lane, and Gregory Connor, USMC, Quantico, Va.

To afford weekend shooters (Sat.-Sun.) an opportunity to fire the Critchfield Course, the metallic ag-

gregates were scheduled on consecutive days (Fri. and Sat.). On Saturday, winds were stronger and sneakier, as evidenced by Whitaker's low winning score of 1597-124X. Meanwhile, Guerin had gained momentum with a 1596-120X, followed by John Lane's 1593-108X, and Allan Knowles' 1592-106X (he had to work on Friday). Harley Jessup, Carl Guenther, and George Stidworthy had 1590's.

Completing his sweep of the metallic aggregates, **Tom Whitaker** cemented his edge with a 3195-254X in the **Metallic Sight 3200 Aggregate** . . . outstanding for the conditions. Western Wildcats Champion **Tom Guerin** moved into second spot, 5 points behind, scoring 3190-238X. **John Lane** was third - 3187-212X, followed by Connor - 3183-202X, Specht - 3181-190X, and Stidworthy - 3181-183X.

"1600 King" **George Stidworthy** confidently attacked the any sight course with a winning 400-39X in the Dewar and 400-34X at 100 yds . . . paced by Whitaker. They both took a tumble at 50-meters and Guerin picked up the ball, tallying 400-32X, one of two clean scores. . . . Rapid changes in angle, direction, and wind velocity took their toll at 100-yds and 50 meters. . . . Stidworthy Creedmoored Harley Jessup's 400-36X at 50-yds with a 20X on the final stage. . . . **Bill Halsted**, who had trouble with his irons, was grumbling to Bob Boydston, whose advice was, "I don't believe you are following through." Even the best shooters may become a little careless at times and need to be reminded of the fundamentals. That's all it took to snap Halsted to

attention, and he came through as something of a "dark horse"—placing third at 100-yds and 2nd in the meter—with the **only 1600 possible**, x 120 in Sunday's Any Sight Aggregate. It was his second 1600. Stidworthy, with 1599-140X, Whitaker and Guerin, who had a pair of 1599's x 133, were breathing down his neck.

Monday conditions were much more compatible—that is, until we reached the final 50-yd match. Stidworthy repeated with a 200-20X and a 200-19X in the Dewar. He took the 100-yd with 400-38X, and appeared on his way to a beautiful aggregate. Then, at 50-meters, it happened again and George got out of step with the conditions. He got a close one and was lucky to be down only 1 point in the second stage. Guerin again collected the top money . . . for a 400-39X. Lane and Specht had 400-35's. . . . Stidworthy bounced back to take the 50-yd - 400-37X, over Neil Van Gelder's 400-36X. (New Jersey shooters do stick together). . . . In the background lurked a formidable contender—**Don Peterson**, of Manteca, California, who after being reclassified to Sharpshooter, placed second in the Western Wildcats 6400 in March. His Master classification restored, Peterson remained consistent on that final day. When the contortions of a 7 o'clock wind played havoc at 50-yds with Guerin, who was clean for the day until the last stage; Whitaker, and others, it was **Don Peterson** who produced the **only 1600** to win the Monday Any Sight Aggregate X-ing 117X. It was also a second 1600 for the affable

Peterson. Eight 1599's were fired by: Stidworthy - 150X, Guerin - 143X, Connor - 139X, Mary Lou Adler and Van Gelder - 131X, Specht - 128X, Bob Bjorklund - 123X, and Bob Boydston - 120X. . . . Lt. Col. John Raymer, Western Wildcats Exec. Officer, was only down 1 point, but had the misfortune of framing a 50-yd target in one stage of the meter.

Tom Guerin had the Any Sight 3200 wrapped up until he lost the point at 50-yds, when the wind abruptly subsided just as he squeezed off. Stidworthy's X-count carried him, dispelling some of his gloom over failing to clean either aggregate. Three 3198's topped the **3200 Scope Aggregate**—: Stidworthy - 290X, Guerin - 276X, and Halsted - 248X. Whitaker had 3197-275X, followed by three 3196's—: Mary Lou Adler's 257X, Boydston's 238X, and Don Peterson's 237X.

Stidworthy was getting some flashy competition from his 14 - year - old daughter, Mary, in the Marksman Class. Having just graduated to shooting scope (in competition) a couple of weeks before in Oregon, Mary not only fired her first 400 in the final aggregate, but continued for a total of three 400's that day. Amazing! Only at 50-meters did she falter . . . just as her Dad did . . . where she lost 5 points. George, obviously there is something that you are not telling her.

The Western Wildcat TOMS—Whitaker with 3196-257X, and Guerin with 3195-253X—ran rampant over those other "cats" in the Critchfield Aggregate . . . just as they did in the Grand.

ALL-AMERICAN 6400

Thomas J. Whitaker 6392-529X
(Winner)

Top Ten

Thomas H. Guerin 6388-514X
George J. Stidworthy, Jr. 6379-473X
Gregory Connor, USMC 6376-459X
John M. Lane 6376-450X
(High Junior)
Mary Lou Adler 6375-435X
(High Lady)
Robert E. Boydston 6375-429X
Joseph Specht 6374-426X
William Halsted 6371-431X
Covina, Calif.
Harley Jessup 6369-468X
La Puente Calif.
Donald L. Peterson 6366-430X

Special "Junior Package"

—metallic sights

Greg S. Baczkowski 3166-183X
Pomona, Calif. (Winner)
Brian J. Cielland 3147-146X
Newport Beach, Calif.
(Runner-up)

Janet M. Cruz 3130-132X
Pasadena Calif. (High Girl)

Richard L. Vining 3116-114X
San Gabriel, Calif.
(1st Sub-Junior)

* * *

A tragic aftermath of this latest victory by a fine young shooter occurred on August 18, when 15-year-old Greg Baczkowski drowned at Imperial Beach, Calif., the victim of a riptide. He and his older brother, Jerry, have been outstanding in the Southern Calif. Junior Rifle League. Greg's death is a shock to everyone. . . . Nick Bard (who placed 3rd above with 3145-148X) was with Greg when he was swept out to sea. . . . A memorial to Greg will send juniors to Perry. He would have liked that.

* * *

Those brave souls who arose at the crack of dawn on Saturday and Sunday to shoot at 7:00 a.m. deserved to set new National Records in the two 4-man team matches (even though they did get a jump on conditions). George Stidworthy predicted negatively that he would be the one to drop a point . . . which serves to point up the power of positive thinking.

The Western Wildcats Rifle Club Team of Deborah N. Hicks (16), Flagstaff, Ariz. - 400-27X, Whitaker - 400-35X, Allan F. Knowles - 400-34X, and George Stidworthy - 399-27X, totaled 1599-123X to upset the **National Open and Civilian Records for 100-yds metallic sights**, held since the 1950's by the famed Brea (Calif.) Junior Rifle Club for their 1591-92X score The Mavericks R & P Club Juniors, led by John Lane's 400-33X and a 400-31X by G. Nelson Cullum, III, added Mary Lou Adler's 399-31X and Beth I. Cullum's 398-24X for a new **National Junior Record** of 1597-119X, which is going to be hard to beat.

"Lovable George" Vartanian organized the San Fernando Valley Explorers I, which established a new **National Open and Civilian Record** with their outstanding 1600-128X at 100-yds any sights. Debby Whitaker, Carl Guenther, and Vartanian tallied 400-33X's, while Don Peterson fortified them with his 400-29X. . . . First Master Team was composed of Debbie Hicks, Tom Whitaker, Knowles, and Stidworthy, which also exceeded the previous record of 1599-106X, held by the U.S. Air Force, with their 1599-132X. . . . The Mavericks R&P Club Juniors again improved upon the Brea Junior Rifle Club's 1594-114X Record. Beth and Nelson Cullum fired 400-29X's; Mary Lou

Adler, a 399-28X; and John Lane, 398-26X, for a new **National Junior Record** of 1597-112X. . . . The Los Angeles Rifle & Revolver Club Expert Class Ladies Team composed of Karla Auer, who had the only 400, Barbara Jessup and Nancy Webb with 399's, and Sue Chase, totaled 1592-104X to up the Alaska Rifle Club's 1567-67X National Ladies Record by 25 points.

* * *

The large black bulls on the new targets are being well-received—except that the white lines on the 50-meter targets are so faint that it impairs the spotting of shots. For 50-meter scope, we used the old targets . . . by popular request.

* * *

National Records are exploding all over—from Manassas to Prescott, Ariz., and back to Roseland, New Jersey! **Three CRITCHFIELD COURSE 3200's** during September, **breaking the National Open, Service, Civilian and Reserve Records**, have distorted the status quo all out of shape!

Igniting still another fuse was young ALLAN F. KNOWLES who equaled the **National Open Record** of 1600-142X for the **Metallic Aggregate**, held by Major Pres Kendall, and wiped out the **National Civilian Record** of 1600-137X on September 11 at Prescott!

On September 4-5, Marines JERRY F. BOSWELL and JOHN E. COMLEY established their beachhead at Manassas, as **National Smallbore Prone Champion Conley** did at Perry. On this occasion, however, Boswell's mission was to lay siege to the Open and Service Critchfield Records held by the Army, under the command of a certain Major Lones W. Wigger, Jr., and labeled 3200-284X. As the attack got under way, the word was passed that the Army stronghold had been left undefended when Major Wigger wrapped up the **National**
(Next page please)

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Smallbore Position Championship . . . for the sixth time . . . and returned to Vietnam.

There is no doubt that the range at Manassas, Virginia, is **Critchfield country**. Its consistently near-perfect conditions have produced more Critchfield 3200's than any other range. Now, you will all wish that you had been there for the Fairfax Prone Regional. From **fifteen 1600 possibles**, not one but **two CRITCHFIELD 3200's** emerged!. . . **JERRY BOSWELL** reported back to Quantico—: "Mission accomplished. Successfully laid siege to Major Wigger's Records. **NATIONAL OPEN AND SERVICE RECORDS** for **CRITCHFIELD COURSE** safely in possession of USMC. Respectfully report score of 3200-286X . . . Over."

Boswell's is the third National Open and Service Critchfield Record credited to the Manassas range. Dean Bahrman, in 1968, recorded 3200-277X. The following year Rans Triggs raised the Open Record at the N.J. State Matches, but Bahrman retained the Service Record until 1970 when Wigger descended upon Manassas and held a field day, X'ing 284 for his 3rd Critchfield 3200.

SGT. JOHN COMLEY, USMCR, continued his smashing drive which began to take shape this summer as the conversion from big bore to small-bore was achieved under the watchful eye of his Marine reservist mentor, Major **Jim Hinkle**. Hinkle well understands what happens when a coach teaches his proteges everything he knows, especially when they add a few tricks of their own. As of Sept. 4-5, Hinkle no longer holds the **National Reserve Record**, which he was not present to defend. **John Comley's** 3200-273X dealt Hinkle's 3199-248X Critchfield Record (1600 iron and 1600 scope) a resounding blow. (Hinkle still holds the Reserve Record for the 3200-point Metallic Agg.).

Any Sight 1600's were fired by: **Michael Kennerly** - 151X, Arlington, Va.; **Mike Eddy** - 150X, Washington, Pa.; **Boswell** - 149X; **Major Bruce A. Meredith**, USAR - 148X, Spartanburg, S.C.; **W/O Ray Green**, USMC - 146X; **Lt. Stuart Watkins**, USAR - 146X; **Wayne Wood** (Expert) - 144X, Sewell, N.J.; **Ronald Plumb** (Junior Expert) - 141X, Vienna, Va.; **Comley** - 140X; **Ray Carter**, 3rd Army ROTC - 140X; **Ray H. Steele** - 139X, Bladensburg, Md.; **Diana Timberlake** - 138X, Alexandria, Va.; **Ken D. Ouellette** (Junior Expert) - 129X, East Lansing, Mich.

Following Boswell and Comley in the Grand Aggregate were Kennerly-

3199-285X; **Green**, USMC - 3199-272X; **Carter** - 3198-281X; **Meredith** - 3198-276X. **Diana Timberlake** received the **High Lady** award for a 3193-244X.

* * *

Two weeks later, the hurricane-force rains and flooding subsided in New Jersey just in time for the **William P. Schweitzer Memorial Championship** at the O'Hare Range in Rose-land. Only a slight drizzle lingered during the first two metallic matches on Saturday a.m. Skies were over-cast throughout the weekend of Sept. 18-19, and the wind only flared up occasionally. On the range which permitted its very first 1600 possibles at the regional a year ago, **ROBERT E. RALSTON**, who has been winning tournaments for years, became the **fifteenth member of the exclusive Critchfield Course 3200 CLUB**, his 3200-283X being #17 and constituting a new **NATIONAL CIVILIAN RECORD**. Going into the last stage of the final 100-yd any sight match, Ralston needed a 16X possible to break **Ransford D. Triggs' 3200-278X** Civilian Record. **Bob Ralston** produced a beautiful 20-X . . . all good inside X's . . . under pressure. That is truly the mark of a champion.

The high scores were a great tribute to our late friend **Bill Schweitzer**. Six 1600's were fired, with Ralston edging **J. H. Snipes**, 1600-133X to 1600-122X in the **Metallic Aggregate**. Ralston was right on the 1600-150X mark to win the **Any Sight Aggregate** over **Rans Triggs' 1600-145X**, **Frank Boyd's 1600-143X**, and **Jack O'Hare's 1600-128X**.

Mrs. Gertrude (William P.) Schweitzer was an honored guest at the range on Sunday afternoon. The world famous artist was presented with a gold charm bearing the emblem of the **New Jersey Smallbore Rifle Shooters Affiliation** by president **Jerome Abelman**, signifying her **Honorary Membership** in the Affiliation. **Mrs. Schweitzer** is the third **Honorary Member**, as **Gary Anderson** and I have previously been voted that honor.

Following **BOB RALSTON's** 3200-283X were **Frank Boyd** - 3199-273X, **Rans Triggs** - 3198-279X, **Jack O'Hare** - 3198-232X, **J. H. Snipes** - 3197-258X, **Ed Clausen** - 3196-237X, **R. Blatchley** - 3192-224X; **High Lady** - **Winnie Carr** - 3191-209X; **Fred Scielzo**, Expert - 3187-216X, and **B. Laudi Jr. (SS)** - **High Junior** - 3184-211X.

There could very well have been a second 3200 that weekend at Rose-land had an unnerving misfortune not befallen the **only shooter to ever** fire a 3200 with irons—**Joseph W.**



Bob Ralston (center), holding 20X possible which he fired on his final stage of the **William P. Schweitzer Memorial** at the O'Hare Range, N. J., upsetting **Rans Triggs' National Civilian Record** for the Critchfield Course. Ralston's new Record is 3200-283X. He is congratulated by **Mrs. Ransford Triggs (left)** and **Mrs. William P. Schweitzer**.

—Photo by Ken Stannard

Barnes. **Joe Barnes** won the 50-yd iron with a 400-37X, had a 400-34X in the 50-meter iron, cleaned the Dewar iron with a good X-count, and was well on his way—until, it was discovered that his 100-yd stage had been fired on the 100-meter target **REDUCED** for 100-yds!!! They were not even firing the reduced target during the weekend! **Joe Barnes** picked it up out of a brand new box of 100-yard targets which somehow had gotten mixed up at **National Target Co.** As **Ken Stannard**, Executive Officer said, "I never had so hard a decision to make, but according to precedent, I had no choice but to disqualify Joe." . . . A top shooter could hardly suffer a more frustrating experience than to be disqualified at that point in a tournament for shooting on a more difficult target when it should not have been in the stack of 100-yard targets in the first place and when he had an awfully good chance of finishing up with a perfect 3200. . . "Random Shots" readers are well aware of the campaign which I have waged on this very matter for many years, which has fallen on "deaf ears".

* * *

**TO: The Chairman of the
NRA Smallbore Committee**

Dear Harry,

The above situation poses a very real threat to the future of the small-bore game. It would be greatly appreciated if you would place the subject on the agenda for your next Smallbore Committee meeting. This is not an isolated instance. It occurs at more tournaments than you may realize. It is our hope that a solution will be forthcoming in the near future.

* * *

It couldn't have been a more ideal weekend in Prescott, Ariz., than Sept. 11-12. And, **ALLAN KNOWLES** was

able to take a little vacation from his work to drive over, relax a bit, and practice with **National Civilian Champion George Stidworthy** on the mile-high range.

* * *

You've been hearing about **Allan Knowles**, and you will be hearing a lot more. His phenomenal rise to fame as **1970 Western Nationals Champion** in his first registered (senior) tournament, at the age of 20, was effectively fortified by a repeat performance at the Los Angeles Rifle & Revolver Club's **1971 Western Nationals**. . . . At Fresno, just prior to that, Allan was gaining momentum as runner-up to **Vic Auer's 1599-128X** in the **Metallic Aggregate**, with his **1598-129X**, and also in the **Regional Championship**, won by Auer's **3198-258X**. Allan's second place score was **3195-258X**.

* * *

Prescott's **Summer 3200** was won by **Debbie Hicks**, then 16, for a **3193-234X**. **Stidworthy** out-X'd **Knowles** for second place, **3191-245X** to **3191-242X**.

But, Allan returned home without his rifle. He decided to leave it with **Bill Atkinson** to be re-crowned and re-chambered. Now, Allan declares that it shoots exactly where he holds it . . . with irons. It isn't always that obedient with scope. . . . He put his **Anschutz barreled-action** in a prone stock belonging to **John Lane's** dad, as his (Allan's) stock is cracked. It is that combination which is shooting so fantastically well. (Guess Allan will have to buy the entire rifle from Mr. Lane in order to keep the stock.)

* * *

At the **Prescott Fall Tournament**, **ALLAN KNOWLES** yielded to no one with irons. He took the **Dewar - 400-36X**, **100-yd - 400-31X**, **50-yd - 400-39X**, and the 50-meter (fired last because the new meter targets failed to arrive) - **400-36X**. . . . We were all thrilled over Allan's **1600-142X** in the **Metallic Aggregate**, making him co-holder of the **NATIONAL OPEN RECORD** and establishing a new **NATIONAL CIVILIAN RECORD**. This erased the record of **1600-137X**, held since July 1958, by **George Whittington** first as an Open Record and later as a Civilian Record. It was equaled by **Edward E. Caygle** on July 15, 1963, at the **Zeppelin Tournament** in Akron, Ohio, but apparently was not reported, and was never recognized. . . . **Rans Triggs** became a co-holder of **Whit's National Civilian Record** in 1969 when he fired his

Open Critchfield Record. Now **Triggs** has lost two of his **National Records** within two weeks.

Excitement was mounting on the scope day at the **Prescott Sportsmen's Club** as **Allan Knowles** was clean through the long range stages. A **3200** seemed almost a certainty, the way he was shooting. Then, at 50-meters there was some tricky wind activity and Allan's **3200** went down the tube. He lost another point at 50-yds, where **Nancy Webb**, of Long Beach, Calif., and **Barney Larrick**, of Tucson, lost their **1600's**.

George Stidworthy won the **Any Sight Aggregate** with **1600-151X**, which was #63 for the "**1600 King**" . . . following a series of **1599's**. (He has since fired #64, however, so perhaps the lean spell is over.) **Bob Boydston** had the only other **1600** possible, with **118X's**. Having had troubles both days, he kept changing rifles, but it was only when he changed ammo for the last two matches that his groups tightened up.

KNOWLES' winning **Grand Agg.** score was **3198-284X**, leading **Stidworthy's 3198-276X**. **Debbie Hicks**, now 17, placed third, scoring **3197-247X**, followed by **Jim Hill's 3196-265X**. . . . **Nancy Webb's 3191-225X** and a **3190-248X** by **Creed Page**, of Grand Junction, Colo., topped the Experts. . . . High Marksman **Mary Stidworthy - 3183-183X**, and **Larrick-3175-195X**, picked up their Expert classifications the following day.

* * *

That weekend **Herb Hollister** and his pen pal "**Orie**" celebrated their respective birthdays. As **Herb** was shooting in the **Scottish Nationals** at the time, we send him belated birthday greetings. We do hope that he will share his experiences in Scotland with P.S. readers. **Herb** has done such a tremendous job as Small-bore Technical Editor . . . contributing more to the shooting game than he could possibly realize. Allan Knowles is but one example of the many who have learned from the **Hollister Theories**. We hope that **Herb** will reconsider.

* * *

Appreciation is expressed to **Jerry Palmer**, the distinguished Editor of the **British Rifleman**, for his kind remarks in their Summer issue regarding "**Random Shots**". The Journal of their **National Small-bore Rifle Association** is a fascinating quarterly publication, which I have thoroughly enjoyed for a number of years. A unique feature is the "**Woman's**

Page", written by '**Amazon**', which not only assures feminine shooters of their importance in the **National Small-bore Rifle Association** but also affords them their own forum. It contains much news of mutual interest to their friends, the feminine shooters on this side of the Atlantic, also . . . Mr. and Mrs. **Palmer** look forward to a visit from Mrs. **William P. Schweitzer** very soon.

* * *

Many happy returns to **FRANK KAHRS**, who will celebrate his 88th birthday on November 14 at his home—**1346 Whitacre Drive, Clearwater, Fla. 33516**. It was wonderful to visit with **Frank** and **Jean** recently when they flew to southern California. . . . Surely no one is more widely known or respected in the shooting world than is "**Mr. Remington**". His greatest joy is in hearing from his friends.

MINNETONKA GAME & FISH CLUB VISITOR SHOOT

Don Judd advises that 12 Bench-esters, including hotshots from nearby states, participated in the **Visitors Heavy Varmint Shoot** (unregistered) held on 18 Sept. 71 at the new range of the **Minnetonka Game & Fish Club** now located near **St. Francis, Minn.** The visitors were impressed by the new concrete benches under permanent hard cover and with the plans for future improvements.

Dick Saunders, **Manchester, Iowa**, collected the **Grand Aggregate Trophy** with a **0.455**; 2nd place by **Bob Wallace**, **MG&F Club**, with a **0.482**; and **Howard Hallgren** 3rd place with a **0.495**. Last place was **0.760**.

Dick Saunders also took the trophy for the best aggregate at 200 yds.; and **Hallgren** of **MG&F Club** was awarded the trophy for the best aggregate at 100 yds. with **0.366**.

Best group trophies were awarded to **Larry White**, **West Salem, Wis.**, for 100 yds. with a **0.210** and **Hallgren** for 200 yds. with **0.366**.

The weather conditions were unusually favorable for this area with a temperature of 55 degrees for the first match in the morning, gradually rising to 67 degrees for the last match in the afternoon and with a cloud cover of about four-tenths. The wind direction for the first match was 12-2 o'clock gradually working around to 4-7 o'clock by the last match of the afternoon with continuously varying speed and short cycle gusting up to 10 mph.

P. G. Carney

Technical COLUMN

M. H. WALKER

Technical Editor
R.D. 1, Warren Road
Mohawk, N. Y. 13407

HOW DOES ONE START BR SHOOTING?

Read about you in the January 1971 issue of Precision Shooting. I have become interested in benchrest shooting but to be honest with you I don't know exactly what to start out with. Do you have any suggestions, brochures, etc.?

Presently I own a Winchester Model 70 heavy barrel .243 and can shoot pretty good with it. I have shot 3/4" groups at 100 yards and 1-1/4" groups at 200 yards with it. I have a Redfield 6X18 power scope with a fine cross and 1/2 to 1-1/2 minute dot on it.

If you had a choice of the following calibers which one would you choose first and in what order would you list them as a preference: 6x47, 222 Mag, 222½ Shilen, 308, 22-45, and 222?

I would greatly appreciate any information you could provide me with. Let me know if you charge a nominal fee for any brochures, etc.

Looking forward to hearing from you real soon, Mr. Walker.

MSGT. Donald L. Pecor
7206 Spt. Gp. CMR Box 4119
APO New York 09223

* * *

If I were to start out in the bench rest game at the present time, I would prefer a rifle in 222 caliber in the 13-1/2 lb. weight. Rifles of this class are available from Remington Arms Company, Inc. in the 40XB and 40XB-BR. They are also available from many custom makers. Most of these advertise in Precision Shooting.

In the bench rest game any rifle you purchase would need to produce groups better than one-half minute of angle out to 200 yards if you are expecting to compete without being handicapped. If you are a subscriber to Precision Shooting, it is suggested that you peruse its columns for a period of several months before you make up your mind where to start.

In the East there are four classes of bench rest: the Hunter Class

which requires a 10-lb. rifle with a 6X scope and shooting is all for score; the Varmint Classes which include the Sporter, Light Varmint and the Heavy Varmint. The first two rifles must weigh 10-1/2 lbs. or less with any power scope, and the heavy varmint must weigh 13-1/2 lbs. or less with any power scope. The Bench Rest Class is essentially unlimited in weight and is fired from sand bags the same as other rifles. There is also a division of the heavy gun called experimental which is fired from so called machine rests.

Enclosed is an IBS Rule Book which will give you some added information. —M.H.W.

VARMINT PISTOL BR SHOOTING

Your Technical Column in September issue of PRECISION SHOOTING carried an inquiry on the XP-100 pistol on the bench from J. H. Bean of Ephratah, Washington.

The idea of the XP-100 on the bench has intrigued me for quite some time and I have just received one from my dealer to start in toying with.

Had a chance not long ago to talk with Tom Seitz, the Pendleton, Ore. gunsmith, and the information he gave me has me just rarin' to go.

In one of their matches not too long ago they had thirty-five of the XP-100's on the firing line and the winning aggregate for five 5-shot groups at 100 yards was just over 1/4 inch!!! That is a good aggregate any day for a light varmint class to say nothing of these short barreled cousins.

Most all of these guns had been re-barreled and many fellows use front sections of Hart barrels removed from their rifles. Most of the bench XP-100's are restocked in a wood or laminated wood stock with a wider and flat forearm to better conform to the sandbag in front. From Tom Seitz I also learned that their shooters stay primarily with the .221 Fireball cartridge and use either the 12 or 14 inch twist barrels.

Many shoot their regular 52 and 53 grain match type bullets and 15½ grs. of 4227 seems a good starting load with the 7½ Rem. primer.

Tom Seitz makes a fully inletted and finish shaped benchrest stock for the XP-100 and the price he quoted was very reasonable. When asked for a suggestion as to scope he promptly recommended the new Lyman 20X All American which I have on order at the present time for my outfit.



M. H. Walker

I hope to stay with the project this winter and if possible will prepare an article on the match possibilities of the XP-100 if you think the interest warrants.

Bob Pease
623 Washington Street
Meadville, Pa. 16335

* * *

Yes, I believe we do need a good long article on how to get started with the varmint pistol bench rest. There seems to be a nucleus of interest in the East.

There is only one drawback; that is the difficulty of getting handgun licenses in some eastern states. Some dope on the different states' laws would be valuable to new recruits for this game.

Assume from your letter that you will outline the methods of getting a bench rest pistol assembled as well as the shooting methods, loads, etc.

—M.H.W.

POWDER FOULING

I have recently been using Winchester's 748BR powder in my .223 40XB. I'm getting very fine, consistent groups but also am getting the most persistent fouling I've ever seen.

In the **Handloader** #30, John Wooster's article on W-W 680 state that he used a fouling remover called Page's Blue Streak to remove this stubborn fouling.

As I've never run across any information, I was wondering if such preparations are of any value in removing fouling, and if they are detrimental to the barrels they are used in. Would appreciate your views on these products.

Guy Cooter
3100 Yukon Road
Bon Air, Virginia 23235

* * *

I am not acquainted with "Page's Blue Streak" for removing fouling. However, if it contains ammonia, ammonium persulfate, or potassium permanganate, to give it the characteristic blue color, I do not recommend its use in a bench rest rifle barrel. Regardless of the recommendations by Howe's Gunsmithing, the Army, or anybody else, it is impossible to use ammonia in its usual form without harm to the bore.

The repeated use of a solvent such as Hoppe's #9 and a new wire brush, allowing the Hoppe's to remain in the bore overnight, is recommended. Repeated daily applications of wire brush and Hoppe's over a period of time will remove stubborn cases of fouling. It just takes effort.

For powder fouling only the wire brush and solvent after every 15 rounds or so will keep the barrel clean. Don't let the fouling build up. Metal fouling builds on top of powder fouling. —M.H.W.

PUBLICATIONS - REM. ACTIONS LOADS FOR 6/47

I notice in the March '68 issue of "Precision Shooting" it mentions a publication which was written for National Bench Rest Shooters Assoc., "The Ultimate in Rifle Precision", edited by Col. Whelen. Can I get this and how much will it cost me?

Also, I have a barrel (heavy S.S.) from a 40X-BR of 6mm Rem., and I am wondering if I can buy an action and trigger from Rem., and how I can turn this rifle into a 6x47. Are there any changes that have to be made in the barrel, and by the way, what twist is the 6mm Rem. in 40X-BR?

I want to do the work myself. Is there a certain book I can refer to as far as how and what to do in changing one caliber into another?

Also, if you have certain loads for the 6x47, and how and from what cases do I make 6x47 shells? What primer would I use and is 4198 powder considered the best for this caliber; what is considered top load?

What do you think of a neck size die from RCBS, as far as perfect alignment with the case of a 6x47, .308 and .222

A few more questions: is a 12" twist good for a .308 (using the 168 International bullet) with a 26" barrel (how good)?

What do you consider a good gunsmith book that I can rely on for

making a rifle and stock, with the best and complete information?

Ernest M. Bethoney
102 Bartlett Street
Brockton, Mass. 02401

* * *

"The Ultimate in Rifle Precision" is out of print. Unless you can find a shooter willing to part with a copy, it is not available. It is suggested, however, that you contact Mrs. Bernice McMullen, Secretary of the National Bench Rest Shooters' Association, 607 West Line Street, Minerva, Ohio 44657, for the last word.

No provision has been made for the sale of Remington actions alone. Unless you have fitted barrels to actions before, do not attempt to do the job yourself. Toolmakers with rifle knowledge can do the work. Otherwise gunsmiths who are capable have generally served an apprenticeship in order to learn the trade. Write to one of the gunsmiths advertising in Precision Shooting for information on used actions and fitting your barrel.

6x47 cases are made from the .222 Magnum by running the neck over a 6mm sizing plug. The sizing plug must be smooth at least down to the diameter of the .222 Magnum. Otherwise difficulties will be experienced with case shortening, etc. Loads for the 6x47 being used by bench rest shooters are:

- 60-62 gr. bullets
 - 23.5 - 24.0 gr. 4198
 - 25.0 - 25.5 gr. RL 7
 - 30.5gr. H380
 - 29.0 - 30.0 gr. WW748
- 70 gr. bullets
 - 23.0 - 23.8 gr. 4198
 - 24.5 - 25.5 gr. RL 7
- Seated to touch lands
 - 29.0 - 30.5 gr. H380
 - 28.5 - 29.5 gr. WW748

I use RCBS neck sizing dies for my bench rest loading.

As far as I know, practically all bench rest shooters are using 14" twist in the .308 with 168 grain. Most national course shooters use 12" twist in order to be able to use 190 grain bullets at 600 yards.

On page 462 of the Gun Digest practically all of the gunsmithing books presently available are listed. I would suggest that you first purchase the Home Gunsmithing Digest, Northfield, Illinois. Then later decide what books you will need. The present day classic is "The Modern Gunsmith" by James V. Howe, Funk & Wagnalls, New York City, \$25.00.

—M.H.W.

Hunter Orange Is No Lemon

By BOB DELFAY
National Shooting Sports
Foundation, Inc.

Since Massachusetts adopted a mandatory hunter orange law nearly 10 years ago, Bay State hunting accidents have dropped almost 70 per cent. In Maine, where the southwest area of the state was used as a test area for this fluorescent reddish orange hue, hunting accidents were cut in half three years in a row.

As a result of these and other outstanding safety records, hunter orange is rapidly becoming a favorite color of upland and big game hunters. Because it occurs nowhere in nature, hunter orange is instantly recognizable as belonging to a hunter, making the wearer much safer than he would be wearing brown, yellow or even the traditional red.

One of the main features of hunter orange that rates it so high with sportsmen is its excellent visibility at the low-light periods of dawn and dusk. During these periods, when most hunters are moving into or out of the woods, hunter orange is almost as easy to see as it is at noon. This is not true of other colors, particularly red, which fades to shadows of brown and black as darkness approaches.

When a color performs as well as hunter orange, it's hard to keep it a secret; and with 400 square inches the common minimum requirement, the color is now required for big game hunters in five states, with laws under consideration in others. In the states where the color is mandatory, it has compiled safety records that surprised even its staunchest supporters and made believers out of the most doubting skeptics.

However, despite these excellent safety records, there are still hunters who refuse to wear it, arguing that it makes them "feel like a neon sign" and insisting that it spooks deer.

For these reluctant sportsmen, all that is often needed to change their minds is a day of hunting with a partner who is wearing hunter orange. When they see how easy it is to see their friend in the densest cover or at long distances, they'll be at their sporting goods store in the morning, ready to be fitted for hunter orange hats and coats.

To Weigh . . . or Measure . . .

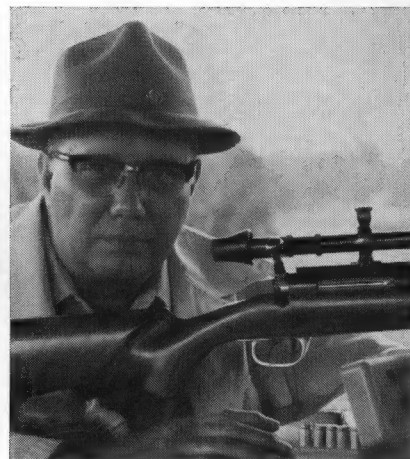
THE BATTLE RAGES ON

Ever since the first accuracy buff tried putting two bullets in the same hole, and that goes back a good many years, shooters have argued the merits of weighed powder charges versus measured charges and to this day the battle wages on. Hunt up some crusty old veteran benchrester with patches all over his shooting coat and chances are you'll observe him flailing away at the handle of a Belding & Mull or Lyman powder measure either with or without new and improved innards by Culver and others who have sought to improve the accuracy of the powder measure.

Yet another veteran with equally as many trophies on his mantle at home may be emptying powder from individual vials used for storage after they had been carefully weighed. Other veteran shooters will have long since given up the former battle and resigned themselves to the ball powders and finer grained IMR

series that will run through most any powder measure with acceptable accuracy. Who is right? Who is wrong? What should you do? These are questions which are most frequently asked by the beginning shooter and often remain a source of confusion to him even after he has received answers from the expert sources as outlined above.

Often forgotten in the problem is the degree of accuracy needed from one powder charge to the next which relates to the cartridge in question as well as the powder chosen. For example, a .308 shooter firing 44 grains of IMR 4895 might show a variation from one thrown charge to the next of 4/10 grain. This checks out at a bit under 1% and a variation that even the most fastidious shooter can live with. A straight .222 shooter loading 19 grains of IMR 4198 will be lucky indeed if his charges do not vary close to 1/2 grain which checks out at 2.6% error and may cause the shooter to have a little less than explicit faith in his powder measure. Certainly this shooter is going to make every effort to control and improve on this accuracy level. He may switch to ball powder, try an-



BOB PEASE

other measure, develop different techniques to aid uniformity such as increased rapping of the measure knocker or new innards for smoother and more accurate cut-off of the granules . . . or he may just simply revert to the tedious job of weighing charges to set his mind at ease completely on this score.

In talking with a great many shooters through the years about this problem, I have yet to find very many that explored the problem and tried to search out a compromise solution. It would seem that one should first determine the error he will achieve with his own powder measure and the powder that performs well in his gun and then test to see what effect this error has on his groups; the ultimate test of the shooting is the grouping. If the measure throws charges ranging from 18.7 grains up to 19.3 grains of 4198 then shoot SEVERAL groups with this spread of powder charges AGAINST SEVERAL groups of powder charges weighed as accurately as you can possibly do them. Is there a difference? Try it again another day before you decide definitely and be sure that you control other conditions as much as humanly possible. Try to fire all groups from a clean, cold barrel with ample time between groups for proper cleaning, cooling and rest. It is important to have ideal conditions for such a test or

By **BOB PEASE**
Meadville, Pa.
Meadville, Penna.

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Bridge Mount Company P. O. Box 3344
Lubbock, Texas 79410

else you will be testing in vain. Try for late evening or early morning hours for your shooting and in some cases it even helps to have someone else handle your ammo for you so you won't know which loads you are shooting at which time. If you have any preconceived ideas as to how the tests should turn out it will be only human nature to try a little harder to substantiate your theory without realizing you are doing it.

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Those wishing to elect installment payments may start **any time**. The only requirement is that the \$125 be paid within a 12 month period. With the first payment a **Provisional Life Member** card will be issued. At completion, the official card will be mailed. Send to IBS headquarters, Box 148, Dolgeville, N. Y. 13329.

International Benchrest Shooters CHARTER MEMBER DIRECTORY

The IBS Charter Member Directory is now available to all **Charter Members** at \$1.00.

The Directory is six by four inches and contains all Charter Clubs, individual members, life members, and associates.

Please include your Charter Member number when ordering. Make check or money order payable to "International Benchrest Shooters", Box 148, Dolgeville, N. Y. 13329.

TRADING POST

Groups of figures, abbreviations and initials count as words. Hyphenated word counts as two words. Name and address of advertiser is counted. Use full words instead of initials and abbreviations and make your meaning entirely clear.

Classified type ads; no display. **Rates:**—10c per word per insertion, prepaid. Minimum charge \$1.00. Closing date for ads is the last Saturday of the month preceding publication.

Jesse M. Grigg of Greenville, Ill. died of a heart attack on Sept. 17, 1971. He had gone to a match at Vincennes, Ind. He became ill and couldn't participate. He died on returning home.

Mr. Grigg enjoyed the sport of shooting to the very end of life. At various times he contributed columns to Precision Shooting. He would have been 85 years old on Dec. 11, 1971.

If your test results indicate that the inherent variation of the powder measure has no effect on the size of your groups then you are in the car barn and can go blissfully ahead measuring charges for the life of that barrel with the usual precautions as to uniformity of operation, periodic checks on the scales and the usual standard handloading procedures.

If you did show up a difference in group size as a result of normal powder measure fluctuation... don't throw that measure in the ashcan. Remember, it will still work fine with ball powder and others of finer granulation... or you might decide to invest in a conversion baffle and closer fitting working parts to cut the error down to a level you can live with.

Quickest and least expensive solution to the immediate problem will be the return to weighing charges, a tedious uninspiring chore to say the least. If this is your choice why not try for a happy medium approach to the problem? Some do this with the scales used in conjunction with the measure and set the measure slightly below the desired charge and throw the charge from the measure directly onto the pan of the scales or balance. Then the amount of powder needed can be readily added with one of the drippers available or with your regular spoon or spatula. A great deal of time will be lost by the handloader who does not understand his scales or balance and who strives for too great a degree of accuracy in his weighing. If you proved to your satisfaction that you couldn't live with 1/2 grain variation between charges from your measure it does not hold true that zero variation will in any way guarantee one hole groups. Try another test, this time with 2/10 variation from charge to charge and chances are you'll find no significant difference that you can attribute to the powder charge variation. Then find out what 2/10 grain variation amounts to on the calibrated scale of your balance or powder scales. Chances are it is a larger error than you ever lived with when you were weighing charges. If so, why not develop a technique of "regulating" powder charges rather than weighing them all?

In a recent test I was able to determine that IMR 3031 powder from my measure varied from charge to charge enough to have some effect on the groups obtained. The particular rifle preferring this powder to all others left me facing the problem of the inherent loss of accuracy if I

measured the powder versus weighing all my charges, the latter a most distasteful summer time occupation. Subsequent tests did indicate that charges which varied plus or minus 3/10 grain were very consistent. This variation when translated to my Ohaus balance would permit a difference of the swing of the beam of about 4 divisions. By throwing the charges with the measure I accepted all charges that showed less than the 4 division deflection and quickly regulated those which were not within tolerance by the addition of a few kernels to bring the swing of the balance within the limits that had been established. Contemplating this article at the time, I ran time checks on three occasions and found that my elapsed time to "regulate" 100 charges as opposed to weighing 100 charges was **LESS THAN HALF** as long. This alone makes a tedious job only half as boring to say the least.

The writer is certain that the data presented above will in no way solve or answer the age old question of weighing versus measuring powder charges for accuracy in the benchrest game. But if it sheds any light for the newer shooter, and he is our competitor of tomorrow, then my meager efforts will have been worthwhile. One final cliché has never been disputed in this game of ours—If you think it helps, it helps... so weigh, measure or "regulate" but keep on striving for those one hole groups.

ROB'T E. KEEL

Arms & Tool Specialist

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12 South St.

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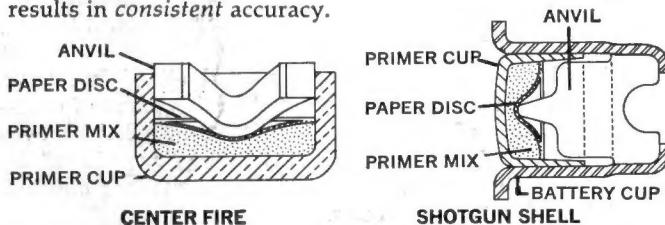
JIM BROBST
299 Poplar St.
Hamburg, Penn. 15526

A primer is a little thing, but so is the 100th of an inch that makes a bench rest champion.

Over 80% of the top shooters at the 1970 National Bench Rest Shooters Association Nationals used Remington primers. Here's why, straight from Remington R&D.

For openers, here's what happens the moment the firing pin touches the primer...

The pin drives the cup toward the anvil. Almost instantly, the explosive mixture is violently compressed between the cup and anvil. The resulting explosion then ignites the main powder charge. It sounds simple. But the number of factors needed to make sure that primer goes off with the same results round after round is a little understood masterpiece of technology. Admittedly, there are few significant differences between one primer and another. But what differences do exist have a subtle effect on the kind of *consistent* shooting that results in *consistent* accuracy.

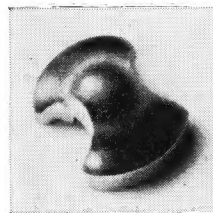


The key to primer performance is "sensitivity"... making sure the primer consistently ignites with minimum striking force. And the key to primer sensitivity is the explosive mixture.

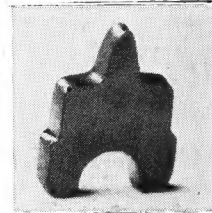
Some time ago, Remington engineers decided that lead styphnate should form the explosive base rather than the potassium chlorate-mercury fulminate mixture used then. As a result, two serious problems were solved. First, the residue from lead styphnate won't corrode the gun. Second, there is no mercury to attack the brass. (Which is why we call them "Kleanbore" primers... the name says it all.)

Along with the basic explosive (we make our own... from scratch) fuels, oxidizers and a sensitizer must be added. We use an organic explosive called "tetrazene" to increase the sensitivity of lead styphnate and to help make sure that misfires are virtually eliminated. Oxidizers and fuels are added to help control the violence of the explosion and to increase the ignition power and efficiency of the priming mixture. Basically, that's the explosive-mixture story. Except for one extra, exclusive touch: each Remington primer pellet is made with a tiny drop of shellac added to the mixture. The result is a degree of protection from moisture.

The smallest primer component—the anvil—also has a great influence on primer sensitivity. Anvils for center fire cartridges and shotshells were easier to design than the anvils used in pistol/revolver ammunition... because a rifle or shotgun hammer delivers more force. So, Remington engineers designed two special anvils for pistol and revolver ammunition. The embossed fin on one and the truncated cone on the other help improve anvil sensitivity.



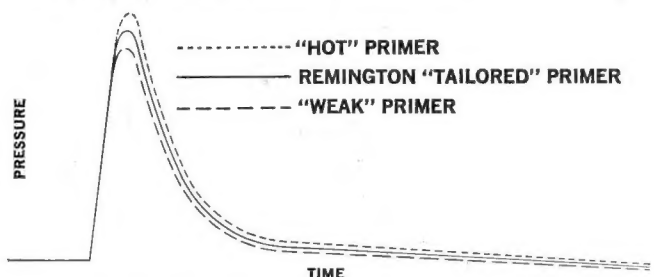
Center fire anvil



Shotgun shell anvil

Even though the tiny anvils are produced by the millions, each is made, and must conform to rigid specifications, to a minute fraction of an inch. And each is subject to close inspection.

The "hot" primer is something handloaders and shooters still argue about. But it makes sense to believe that if the hot primer really added to ballistics, Remington would be way out front with a hot primer. However, continuing Remington research leads us to conclude that a hot primer doesn't significantly improve ballistics or accuracy. It may add a few feet per second, but it also generates greater pressures... which *isn't* always a safe thing. If you're interested in improving ballistics and accuracy, you'll accomplish more by working with the front end of the cartridge instead of the rear. As one of our more philosophical research people put it: "Why light a cigarette with a blowtorch?"



As important as sensitivity is, so is uniformity. Uniformity of explosive mixture. (Even the size and shape of lead-styphnate crystals are controlled by Remington processes.) For example, consider "barrel time"... the time from the instant of primer ignition to the instant the bullet leaves the barrel. The uniformity built into every Remington-Peters primer insures that, with everything else equal, barrel time is almost the same from primer to primer. So a shooter has a better chance of having the bullet leave the barrel, round after round, when that barrel is in the same position of its vibration arc. That's accuracy. And accuracy is what Remington-Peters primers are all about.

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